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**PRODUCT CATALOG**

# THE ONLY WAY TO TERMINATE A KEYSTONE IS WITH @VERTICALCABLE

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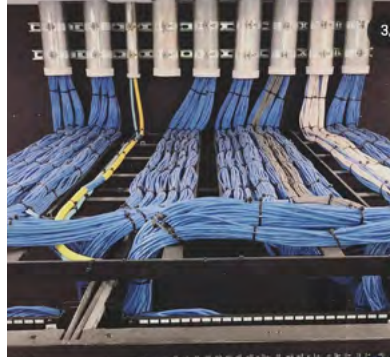
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nw\_tel  
Orlando, Florida



jbtssystem



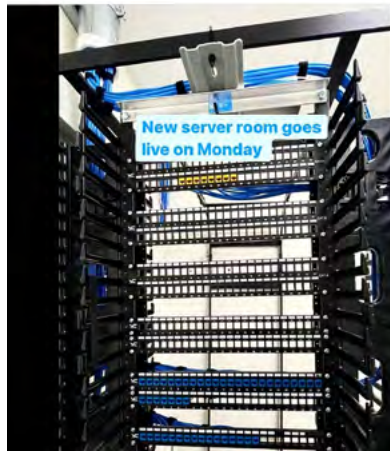
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## THANK YOU @VERTICALCABLE FOR ANOTHER AMAZING PRODUCT (15U WALL-MOUNT SWING OUT ENCLOSURE) - @BUILDLOGICS

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Mount Vernon, Washington



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Tops Diner



technologyintegrationsolutions



## SOME OF OUR LEFTOVER PILE OF @VERTICALCABLE WIRE! NOTHING BUT THE BEST

- @ITWORKSSOLUTIONS



**MIKE SATTARZADEH**  
**President**



Vertical Cable and its parent company, Chiptech, Inc., have been serving the Information Technology and Communications industry since 1989.

In 2006, Vertical Cable refocused its business vision and transformed operations becoming a cable manufacturer and distributor.

Since 2006, Vertical Cable has expanded its presence nationwide with three distribution facilities in Florida, New York, California, and a cable manufacturing facility in Texas.

In 2020, Vertical Cable entered the optical fiber market with its first outside-plant singlemode cable stocked at its new facility in North Carolina.

In 2021, Vertical Cable continues expanding its operations by targeting optical fiber project solutions with its connectivity portfolio that now includes connectors, enclosures, panels, cassettes, splicing, termination, installation, and testing products.





Vertical Cable has multiple stocking locations across the USA. The West Coast location in Murrieta, CA, services customers as far as Central USA and Alaska.

The North East location in New Windsor, NY, services customers from Canada and the East coast, to Central USA.

The Southern Fort Lauderdale location services as far as South America and the Caribbean. Corporate Headquarters are located in Fort Lauderdale, FL.

Manufacturing Plant is located in Bonham, TX.

Bulk Optical Fiber cables are are stocked and shipped out of our North Carolina facility.

### FLORIDA

#### Headquarters

2885 SW 30th Avenue, Pembroke Park, FL 33009

#### Business Hours:

Monday - Friday 8:00 AM - 5:00 PM (EST)

#### Product Information and Sales:

Sales Inquiries: [fl-sales@verticalcable.com](mailto:fl-sales@verticalcable.com)  
800.749.2447 phone  
954.454.2167 fax

Se Habla Español  
(pregunta por un representante en español)

### CALIFORNIA

#### Address:

41715 Cherry Street, Murrieta, CA 92562

#### Business Hours:

Monday - Friday: 8:00 AM - 5:00 PM (PST)

#### Product Information and Sales:

Sales Inquiries: [sales@verticalcable.com](mailto:sales@verticalcable.com)  
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951.696.2227 fax

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### NEW YORK

#### Address:

1073 Route 94, Unit 1, New Windsor, NY 12553

#### Business Hours:

Monday - Friday 8:00 AM - 5:00 PM (EST)

#### Product Information and Sales:

Sales Inquiries:  
[ny-sales@verticalcable.com](mailto:ny-sales@verticalcable.com)  
845.391.8318 phone  
845.391.8478 fax

### NORTH CAROLINA

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5584 York Road, Granite Falls, NC 28630

#### Business Hours:

Monday - Friday 8:00 AM - 5:00 PM (EST)

#### Product Information and Sales:

Sales Inquiries:  
[salesnc@verticalcable.com](mailto:salesnc@verticalcable.com)  
828.212.0554 phone  
954.454.9563 fax



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**CONTACT**  
**800-749-2447**

[fl-sales@verticalcable.com](mailto:fl-sales@verticalcable.com)



# TWISTED-PAIR SYSTEMS

Photo by Pearce Smithwick, All Green Lights LLC

# CAT6a CABLE

CAT6a		
	UTP (Unshielded)	F/UTP (Shielded)
<b>CMP (Plenum)</b>	176 Series (ETL) - USA 065 Series (UL) - TAA	165-XXX/A/PS/XX (UL) - TAA
<b>CMR (Riser)</b>	064-XXX/A/XX (ETL)	064-XXX/A/S/XX (ETL)
<b>Outdoor (UV)</b>		
CMX	069-564/A/CMX (ETL)	-
<b>Direct Burial</b>		
Dual jacket	-	069-565/A/CMXT (ETL)

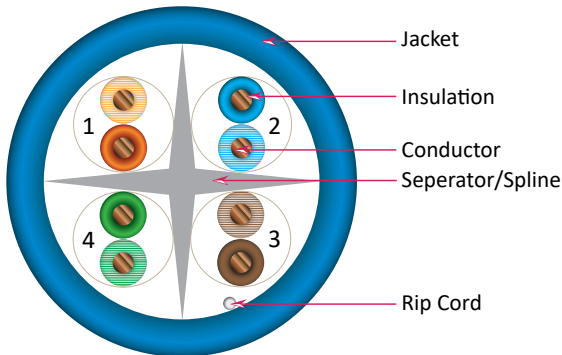
## Part Number Anatomy:

XXX-XXX/X/PS/XX - Plenum-Rated, Shielded  
 XXX-XXX/X/S/XX - Shielded  
 XXX-XXX/X/CMXT - CMX (double jacket)  
 XXX-XXX/P/XX - Plenum-Rated  
 XXX-XXXX/A/XX - CAT6a  
 XXX-XXX/X/BK - Color (in this case Black)  
 Other colors: BL (blue), GR (green), GY (gray), OR (orange), PK (pink), PR (purple), RD (red), WH (white), YL (yellow)

## CAT6a Plenum UTP

176 SERIES - CAT6a PoE++ CMP UTP - Made in the USA

**MADE IN USA**



### Features:

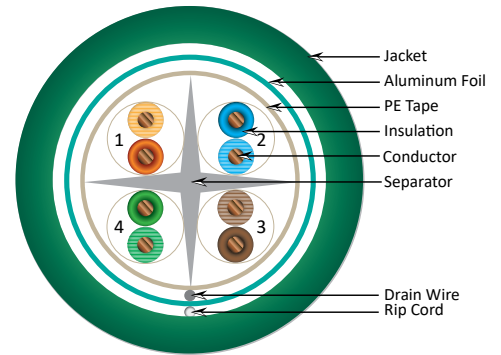
- Meets or exceeds ANSI/TIA-568.2-D specifications
- 4-pair unshielded (UTP) construction
- 23-AWG insulated bare solid copper conductors
- Plenum-rated (CMP) insulation and overall jacket materials
- Central spline and internally-ribbed jacket ensure excellent X-talk performance
- Meets PoE Type 4 specifications including all preceding Types
- Supports IEEE 802.3 technologies up to 10 Gb/s (802.3an 10GBASE-T)
- Meets HDBaseT specifications up to Spec 3.0

Available in 1000 ft and 500 ft

Item #	Description
176-300/A/P/BK	CAT6a, PoE++, 23 AWG, 4 Pair, UTP, CMP, 1000 ft, Black
176-305/A/P/BL	CAT6a, PoE++, 23 AWG, 4 Pair, UTP, CMP, 1000 ft, Blue
176-310/A/P/GR	CAT6a, PoE++, 23 AWG, 4 Pair, UTP, CMP, 1000 ft, Green
176-315/A/P/GY	CAT6a, PoE++, 23 AWG, 4 Pair, UTP, CMP, 1000 ft, White
176-320/A/P/OR	CAT6a, PoE++, 23 AWG, 4 Pair, UTP, CMP, 1000 ft, Yellow
176-325/A/P/PK	CAT6a, PoE++, 23 AWG, 4 Pair, UTP, CMP, 1000 ft, Gray
176-330/A/P/PR	CAT6a, PoE++, 23 AWG, 4 Pair, UTP, CMP, 1000 ft, Red
176-335/A/P/RD	CAT6a, PoE++, 23 AWG, 4 Pair, UTP, CMP, 1000 ft, Red
176-340/A/P/WH	CAT6a, PoE++, 23 AWG, 4 Pair, UTP, CMP, 1000 ft, White
176-345/A/P/YL	CAT6a, PoE++, 23 AWG, 4 Pair, UTP, CMP, 1000 ft, Yellow

# CAT6a Cable ▶ CAT6 Plenum CAT6a Plenum F/UTP

CAT6a, 10Gb, 23 AWG, 4 Pair, F/UTP, CMP



### Features:

- 23 AWG Bare Copper Conductors
- Overall Foil-Shielded Twisted-Pair (F/UTP) Construction
- Plenum Fire Safety Rating (CMP)
- Easy-to-See Vivid-Color Conductor Insulation & Jacket
- Exceeds ANSI/TIA-568.2-D and ISO/IEC 11801 Transmission Performance Specifications
- Supports High-Speed Data Applications including Ethernet 10 Gigabit, 100 BASE TX, 100BaseVG AnyLan, 155ATM, 622ATM, NTSC/PAL, Component or Composite Video, AES/EBU Digital Audio, AES51, RS-422
- UL-Listed, RoHS-Compliant
- Designed in the USA, Imported Product (TAA-Compliant)
- Packaging: 1000 ft Wooden Spool

Item #	Description
165-300/A/PS/BK	CAT6a, 1000 ft, Black
165-301/A/PS/BL	CAT6a, 1000 ft, Blue
165-302/A/PS/GR	CAT6a, 1000 ft, Green
165-308/A/PS/WH	CAT6a, 1000 ft, White
165-309/A/PS/YL	CAT6a, 1000 ft, Yellow

### With CAT6a Cable Our Customers Usually Buy These Products:



Velcro Tie Wrap



RJ45 Plugs



Tools



Horizontal Cable Managers



Feed-through Wall Plate

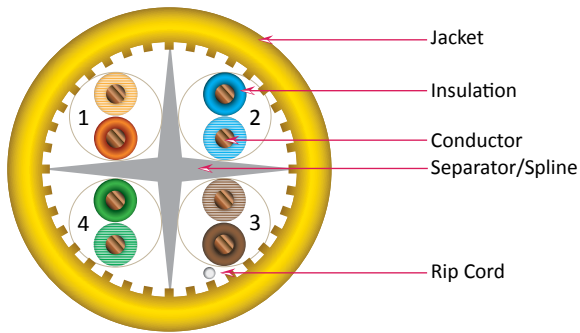


Adjustable Wall-Mount Bracket



# CAT6a Cable ▶ CAT6a

## CAT6a Riser UTP



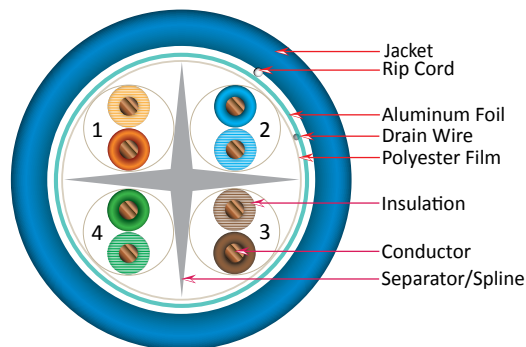
### Features:

- 23 AWG Bare Copper Conductors
- Unshielded Twisted-Pair (UTP) Construction
- Riser Fire Safety Rating (CMR)
- Easy-to-See Vivid-Color Conductor Insulation & Jacket
- Exceeds ANSI/TIA-568.2-D and ISO/IEC 11801 Transmission Performance Specifications
- Supports High-Speed Data Applications including Ethernet 10 Gigabit, 100 BASE TX, 100BaseVG AnyLan, 155ATM, 622ATM, NTSC/PAL, Component or Composite Video, AES/EBU Digital Audio, AES51, RS-422
- ETL-listed, RoHS-Compliant
- Designed in the USA, Imported Product
- Packaging: 1000 ft Wooden Spool

Item #	Description
064-484/A/BK	CAT6a, 1000 ft, Spool, Black
064-485/A/BL	CAT6a, 1000 ft, Spool, Blue
064-688/A/GY	CAT6a, 1000 ft, Spool, Gray
064-687/A/GR	CAT6a, 1000 ft, Spool, Green
064-692/A/RD	CAT6a, 1000 ft, Spool, Red
064-486/A/WH	CAT6a, 1000 ft, Spool, White
064-693/A/YL	CAT6a, 1000 ft, Spool, Yellow
064-689/A/OR	CAT6a, 1000 ft, Spool, Orange

## CAT6a Solid Riser F/UTP

CAT6a, 10Gb, 23 AWG, 4 Pair, F/UTP, CMR



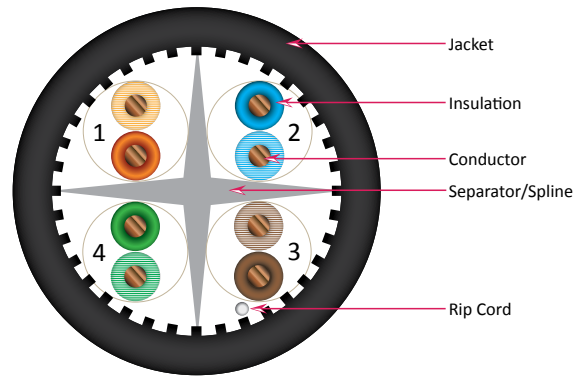
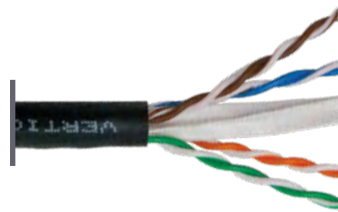
### Features:

- 23 AWG Bare Copper Conductors
- Overall Shielded Twisted-Pair (F/UTP) Construction
- Riser Fire Safety Rating (CMR)
- Easy-to-See Vivid-Color Conductor Insulation & Jacket
- Exceeds ANSI/TIA-568.2-D and ISO/IEC 11801 Transmission Performance Specifications
- Supports High-Speed Data Applications including Ethernet 10 Gigabit, 100 BASE TX, 100BaseVG AnyLan, 155ATM, 622ATM, NTSC/PAL, Component or Composite Video, AES/EBU Digital Audio, AES51, RS-422
- ETL-listed, RoHS-Compliant
- Designed in the USA, Imported Product
- Packaging: 1000 ft Wooden Spool

Item #	Description
064-700/A/S/BK	CAT6a, 1000 ft, Spool, Black
064-701/A/S/BL	CAT6a, 1000 ft, Spool, Blue
064-702/A/S/GR	CAT6a, 1000 ft, Spool, Green
064-703/A/S/GY	CAT6a, 1000 ft, Spool, Gray
064-707/A/S/RD	CAT6a, 1000 ft, Spool, Red
064-708/A/S/WH	CAT6a, 1000 ft, Spool, White
064-709/A/S/YL	CAT6a, 1000 ft, Spool, Yellow
064-704/A/S/OR	CAT6a, 1000 ft, Spool, Orange

TWISTED-PAIR SYSTEMS

## CAT6a Cable ▶ CAT6a Outdoor CAT6a Outdoor-Rated - CMX

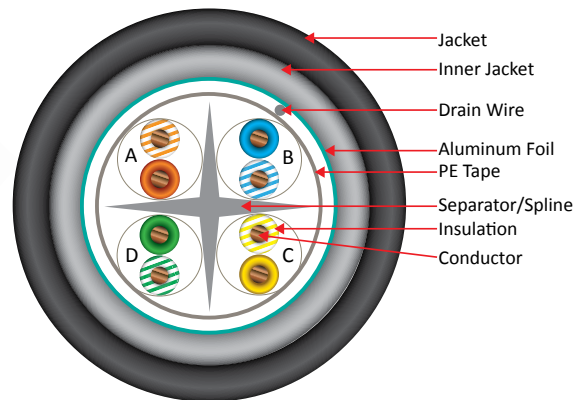


### Features:

- 23 AWG Bare Copper Conductors
- Unshielded Twisted-Pair (UTP) Construction
- Outdoor- and UV-Resistant Jacket Material
- For outdoor use above ground
- Easy-to-See Vivid-Color Conductor Insulation & Jacket
- Exceeds ANSI/TIA-568.2-D and ISO/IEC 11801 Transmission Performance Specifications
- Supports High-Speed Data Applications including Ethernet 10 Gigabit
- ETL-listed, RoHS Compliant
- Packaging: 1000 ft Wooden Spool

Item #	Description
069-564/A/CMX	CAT6a, Outdoor, CMX, 23 AWG, 4 Pair, UTP, 1000 ft, Spool, Black

## CAT6a Outdoor-Rated, Direct Burial - CMX (DUAL JACKET)



### Features:

- 23 AWG Bare Copper Conductors
- Unshielded Twisted-Pair (UTP) Construction
- Outdoor- and UV-Resistant Jacket Material
- For outdoor use above ground and/or direct burial
- Easy-to-See Vivid-Color Conductor Insulation & Jacket
- Exceeds ANSI/TIA-568.2-D and ISO/IEC 11801 Transmission Performance Specifications
- Supports High-Speed Data Applications including Ethernet 10 Gigabit
- ETL-listed, RoHS Compliant
- Packaging: 1000 ft Wooden Spool
- Compatible with 012-021-100 RJ45 connectors

Item #	Description
069-565/A/CMXT	CAT6a, Direct Burial or Cell Tower Applications, CMXT, Shielded, Dual Jacket, 23 AWG, 4 Pair, F/UTP, 1000 ft, Spool, Black

CAT6		
	UTP	F/UTP
<b>CMP</b>	166 Series (ETL) - USA 167 Series (UL) - USA 066 Series (UL)	168-XXX/S/P/XX (UL) - TAA
<b>CMR</b>	161 Series (ETL) - TAA 060 Series (ETL)	062-XXX/S/XX (ETL)
<b>Low Smoke Zero Halogen (LSZH) Outdoor (UV)</b>	070 Series (ETL)	-
CMX	069-559/CMX (ETL)	-
with Messenger	069-562/MESG (ETL)	069-563/S/MESG (ETL)
<b>Direct Burial</b>		
Double jacket	069-557/US/CMXT (ETL)	069-556/CMXT2K (ETL) 069-561/CMXT (ETL)
Gel-flooded core	069-560/CMXF (ETL)	069-558/S/CMXF (ETL)

## Introducing CAT6 UTP CMP Slim Type - Made in USA

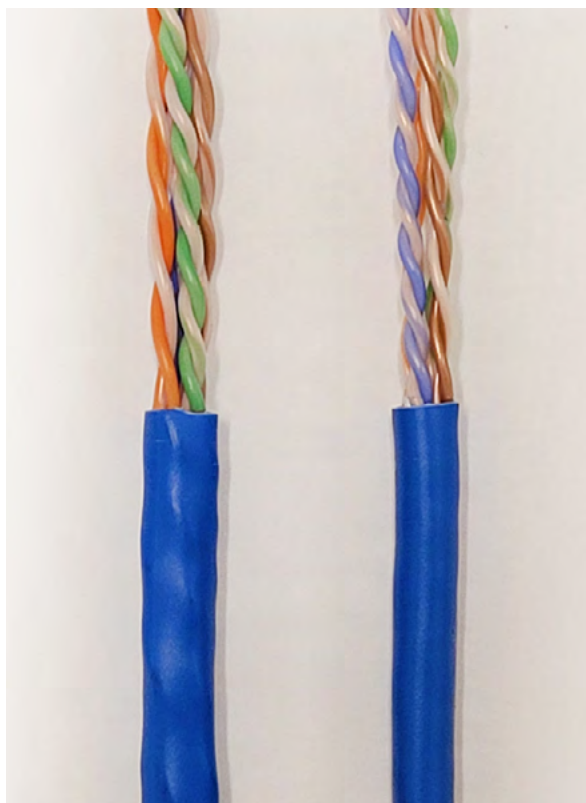
**MADE IN USA**

### Benefits of Slim CAT6

- Easier to manage in high density panels
- Increased capacity for conduit fill
- Light-weight
- Easier to pull
- More flexible
- Slim design supports 100W (POE++)

### Design Modifications

- Copper diameter reduction
- Conductor diameter reduction
- Spline-less design
- Filler-less design
- Smaller overall cable diameter
- Less irregular, smooth jacket surface

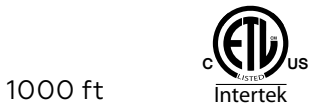


Regular  
CAT6

Slim  
CAT6

# CAT6 Cable ▶ CAT6 Plenum CAT6 CMP Plenum-Rated Slim Type - Made in USA

CAT6, 23 AWG, 4 Pair, UTP, CMP



1000 ft



500 ft

**MADE IN USA**



TWISTED-PAIR SYSTEMS

Item #	Description	Item #	Description
166-250/P/BK	1000 ft, Black	166-810/P/5BK	500 ft, Black
166-251/P/BL	1000 ft, Blue	166-811/P/5BL	500 ft, Blue
166-252/P/GR	1000 ft, Green	166-812/P/5GR	500 ft, Green
166-253/P/GY	1000 ft, Gray	166-813/P/5GY	500 ft, Gray
166-254/P/OR	1000 ft, Orange	166-814/P/5OR	500 ft, Orange
166-255/P/PK	1000 ft, Pink	166-815/P/5PK	500 ft, Pink
166-256/P/PR	1000 ft, Purple	166-816/P/5PR	500 ft, Purple
166-257/P/RD	1000 ft, Red	166-817/P/5RD	500 ft, Red
166-258/P/WH	1000 ft, White	166-818/P/5WH	500 ft, White
166-259/P/YL	1000 ft, Yellow	166-819/P/5YL	500 ft, Yellow

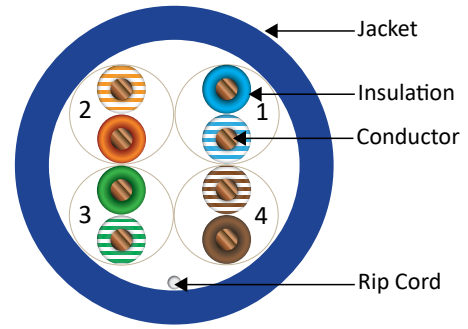


1000 ft



500 ft

Item #	Description	Item #	Description
167-100/P/BK	1000 ft, Black	167-910/P/5BK	500 ft, Black
167-101/P/BL	1000 ft, Blue	167-915/P/5BL	500 ft, Blue
167-102/P/GR	1000 ft, Green	167-920/P/5GR	500 ft, Green
167-103/P/GY	1000 ft, Gray	167-925/P/5GY	500 ft, Gray
167-104/P/OR	1000 ft, Orange	167-930/P/5OR	500 ft, Orange
167-105/P/PK	1000 ft, Pink	167-935/P/5PK	500 ft, Pink
167-106/P/PR	1000 ft, Purple	167-940/P/5PR	500 ft, Purple
167-107/P/RD	1000 ft, Red	167-945/P/5RD	500 ft, Red
167-108/P/WH	1000 ft, White	167-950/P/5WH	500 ft, White
167-109/P/YL	1000 ft, Yellow	167-955/P/5YL	500 ft, Yellow



## Features:

- 4-Pair Unshielded Twisted-Pair (UTP) Construction
- Plenum Fire Safety Rating (CMP)
- 23 AWG Bare Copper Conductors
- Easy-to-See Vivid-Color Conductor Insulation and Cable Jacket
- Moisture-Resistant Box equipped with easy-to-pull tube
- Supports High-Speed Data Applications, Fast Ethernet and 155-Mbit/s TP-PMD/CDDI
- Supports High-Speed Data Applications up to 1 Gbit/s
- Excellent Insertion Loss and Crosstalk Characteristics
- ETL-listed, ETL-Verified Channel, RoHS-Compliant (166 Series)
- UL-Listed, RoHS-Compliant (167 Series)
- Covered by 25-Year Warranty
- Made in the USA
- Available Packaging: 500 ft & 1000 ft Pull Box

**Slim design allows to reduce the pull box size.**

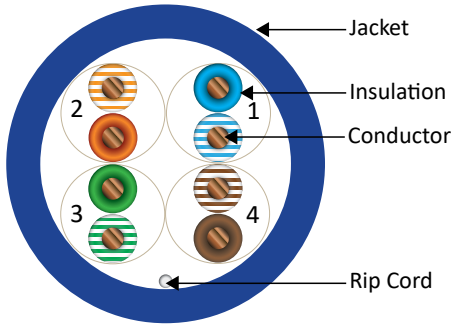


Slim design - lower weight (4.5 lb reduction per 1000 ft box).

# CAT6 Cable ▶ CAT6

## CAT6 UTP Plenum-Rated - TAA-Compliant

066 SERIES - CAT6 550 MHz Cable, 23 AWG, UTP



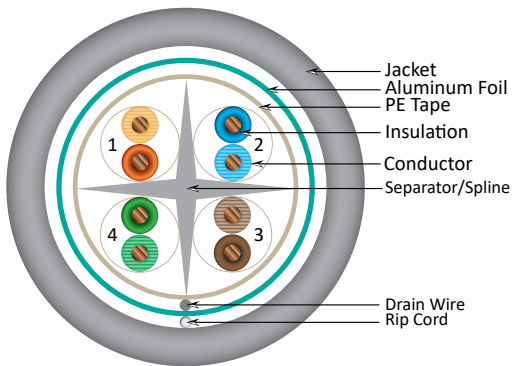
### Features:

- Unshielded Twisted Pair (UTP) Cable
- Plenum Fire Safety Rating (CMP)
- 23 AWG Bare Copper Conductors
- Easy-to-See Vivid-Color Conductor Insulation and Cable Jacket
- UL-Listed, RoHS-Compliant
- Designed in the USA, Imported Product - TAA Compliant
- Packaging: 1000 ft Pull Box

Item #	Description
066-555/P/BL	1000 ft, Pullout Box, Blue
066-557/P/GY	1000 ft, Pullout Box, Gray
066-663/P/PK	1000 ft, Pullout Box, Pink
066-559/P/WH	1000 ft, Pullout Box, White
066-660/P/YL	1000 ft, Pullout Box, Yellow

# CAT6 F/UTP Plenum-Rated - TAA-Compliant

168 SERIES - CAT6 CMP F/UTP (Shielded)



### Features:

- Overall Foil-Shielded Twisted-Pair (F/UTP) Construction
- Plenum Fire Safety Rating (CMP)
- 23 AWG Bare Copper Conductors
- Easy-to-See Vivid-Color Conductor Insulation & Jacket
- Exceeds ANSI/TIA-568.2-D and ISO/IEC 11801 Transmission Performance Specifications
- UL-Listed, RoHS-Compliant
- Designed in the USA, Imported Product - TAA-Compliant
- Packaging: 1000 ft Wooden Spool

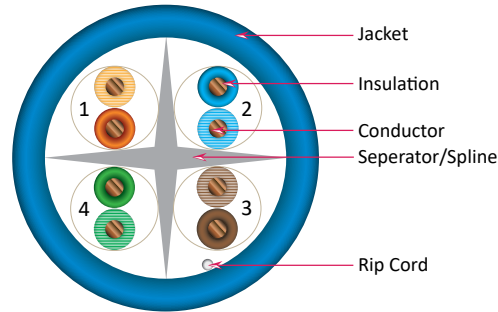
Item #	Description
168-300/S/P/BK	1000 ft, Wooden Spool, Black
168-301/S/P/BL	1000 ft, Wooden Spool, Blue
168-302/S/P/GR	1000 ft, Wooden Spool, Green
168-303/S/P/GY	1000 ft, Wooden Spool, Gray
168-308/S/P/WH	1000 ft, Wooden Spool, White
168-309/S/P/YL	1000 ft, Wooden Spool, Yellow

TWISTED-PAIR SYSTEMS

# CAT6 Cable ▶ CAT6

## CAT6 CMR UTP - TAA-Compliant

161 SERIES - CAT6 CMR UTP 550 MHz, 23 AWG - RISER-RATED



TWISTED-PAIR SYSTEMS

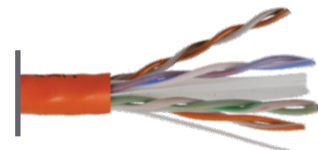
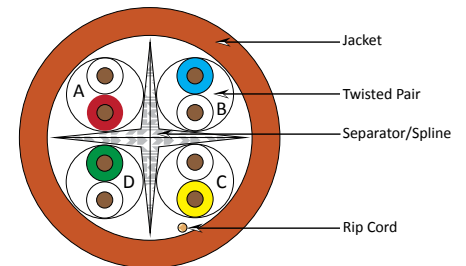
Item #	Description
161-101/BK	1000 ft, Pullout Box, Black
161-102/BL	1000 ft, Pullout Box, Blue
161-103/GR	1000 ft, Pullout Box, Green
161-104/GY	1000 ft, Pullout Box, Gray
161-105/OR	1000 ft, Pullout Box, Orange
161-106/PK	1000 ft, Pullout Box, Pink
161-107/PR	1000 ft, Pullout Box, Purple
161-108/RD	1000 ft, Pullout Box, Red
161-109/WH	1000 ft, Pullout Box, White
161-110/YL	1000 ft, Pullout Box, Yellow

### Features:

- Unshielded Twisted-Pair (UTP) Construction
- Riser Fire Safety Rating (CMR)
- 23 AWG Bare Copper Conductors
- Easy-to-See Vivid-Color Conductor Insulation and Cable Jacket
- Exceeds ANSI/TIA-568.2-D and ISO/IEC 11801 Transmission Performance Specifications
- Easily Identified Color-Striped Pairs
- ETL-listed, RoHS-Compliant
- Designed in the USA, Imported Product - TAA-Compliant (Made in South Korea)
- Packaging: 1000 ft Pull Box

## 060 SERIES - CAT6 CMR UTP 550 MHz, 23 AWG, UTP - Designed in the USA, Imported Product (China)

Item #	Description
060-487/BK	1000 ft, Pullout Box, Black
060-488/BL	1000 ft, Pullout Box, Blue
060-489/GR	1000 ft, Pullout Box, Green
060-490/GY	1000 ft, Pullout Box, Gray
060-2395/OR	1000 ft, Pullout Box, Orange
060-495/PK	1000 ft, Pullout Box, Pink
060-491/PR	1000 ft, Pullout Box, Purple
060-492/RD	1000 ft, Pullout Box, Red
060-493/WH	1000 ft, Pullout Box, White
060-494/YL	1000 ft, Pullout Box, Yellow



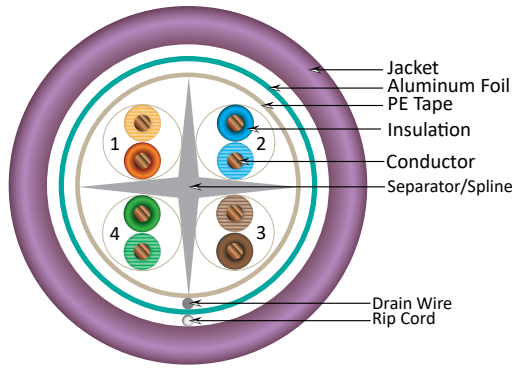
- Unshielded Twisted-Pair (UTP) Construction
- Riser Fire Safety Rating (CMR)
- 23 AWG Bare Copper Conductors
- Easy-to-See Vivid-Color Conductor Insulation and Cable Jacket
- Exceeds ANSI/TIA-568.2-D and ISO/IEC 11801 Transmission Performance Specifications
- Easily Identified Color-Striped Pairs
- ETL-listed, RoHS-Compliant
- Designed in the USA, Imported Product
- Packaging: 1000 ft Pull Box



Designed in the USA, Imported Product

# CAT6 Cable ▶ CAT6

062 SERIES - CAT6 CMR F/UTP 550 MHz Cable, 23 AWG - RISER-RATED



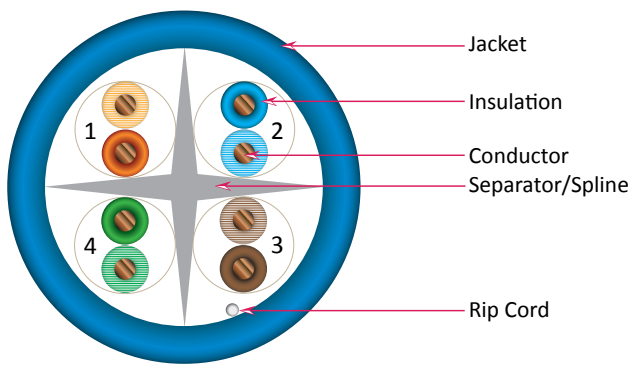
### Features:

- Overall Foil-Shielded Twisted-Pair (F/UTP) Construction
- Riser Fire Safety Rating (CMR)
- 23 AWG Bare Copper Conductors
- Easy-to-See Vivid-Color Conductor Insulation & Jacket
- Exceeds ANSI/TIA-568.2-D and ISO/IEC 11801 Transmission Performance Specifications
- ETL-listed, RoHS-Compliant
- Designed in the USA, Imported Product
- Packaging: 1000 ft Wooden Spool

Item #	Description
062-503/S/BK	CAT6 550 MHz Cable, 23 AWG, F/UTP, 4 Pairs, 1000 ft, Black
062-504/S/BL	CAT6 550 MHz Cable, 23 AWG, F/UTP, 4 Pairs, 1000 ft, Blue
062-505/S/GR	CAT6 550 MHz Cable, 23 AWG, F/UTP, 4 Pairs, 1000 ft, Gray
062-506/S/GY	CAT6 550 MHz Cable, 23 AWG, F/UTP, 4 Pairs, 1000 ft, Green
062-507/S/OR	CAT6 550 MHz Cable, 23 AWG, F/UTP, 4 Pairs, 1000 ft, Orange
062-502/S/PR	CAT6 550 MHz Cable, 23 AWG, F/UTP, 4 Pairs, 1000 ft, Purple
062-508/S/RD	CAT6 550 MHz Cable, 23 AWG, F/UTP, 4 Pairs, 1000 ft, Red
062-509/S/WH	CAT6 550 MHz Cable, 23 AWG, F/UTP, 4 Pairs, 1000 ft, White
062-510/S/YL	CAT6 550 MHz Cable, 23 AWG, F/UTP, 4 Pairs, 1000 ft, Yellow

TWISTED-PAIR SYSTEMS

# CAT6 Low Smoke Zero Halogen (LSZH)

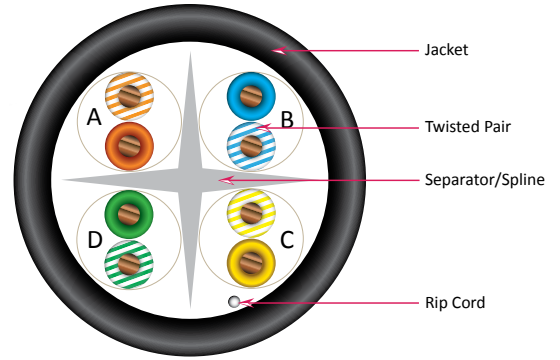
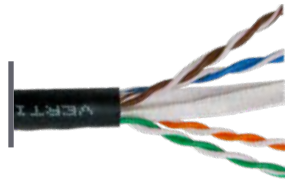


### Features:

- Unshielded Twisted Pair (UTP) Cable
- 23 AWG Bare Copper Conductors
- Jacket Material: Low Smoke Zero Halogen
- Easily Identified Color-Striped Pairs
- Easy-to-See Vivid-Color Conductor Insulation & Jacket
- Exceeds ANSI/TIA-568.2-D and ISO/IEC 11801 Transmission Performance Specifications
- 1000 ft Pull Box

Item #	Description
070-711/6LS/BL	CAT6 23 AWG, UTP, LSZH Jacket, 1000 ft, Pull Box, Blue
070-713/6LS/GY	CAT6 23 AWG, UTP, LSZH Jacket, 1000 ft, Pull Box, Gray
070-718/6LS/WH	CAT6 23 AWG, UTP, LSZH Jacket, 1000 ft, Pull Box, White

# CAT6 Cable ▶ CAT6 Outdoor CAT6 Outdoor-Rated, CMX



### Features:

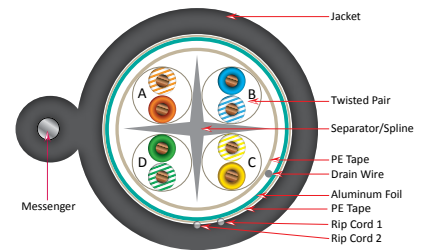
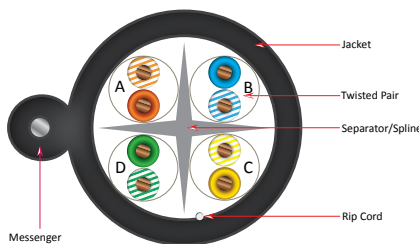
- Unshielded Twisted-Pair (UTP) Construction
- 550 MHz Bandwidth for Data Applications, Fast Ethernet and 155Mbps TP-PMD/CDDI
- Easily Identified Color-Striped Pairs
- 23 AWG Solid Copper Conductors
- Exceeds ANSI/TIA-568.2-D and ISO/IEC 11801 Transmission Performance Specifications
- Outdoor- and UV-Resistant Jacket Material
- ETL-listed, RoHS Compliant
- 1000 ft Wooden Spool

Item #	Description
069-559/CMX	CAT6 Outdoor Jacket, UV-Rated Jacket, CMX-Rated, 1000 ft, Wooden Spool, Black



TWISTED-PAIR SYSTEMS

# CAT6 Outdoor-Rated With Messenger Aerial Applications - Unshielded & Shielded



Item #	Description
069-562/MESG	CAT6 UTP, Outdoor-Rated with Messenger, Aerial Applications, <b>Unshielded</b> , LLDPE Jacket, 23 AWG, Solid Bare Copper, 1000 ft, Spool, Black
069-563/S/MESG	CAT6 F/UTP, Outdoor-Rated with Messenger, Aerial Applications, <b>Shielded</b> , LLDPE Jacket, 23 AWG, Solid Bare Copper, 1000 ft, Spool, Black

### Features:

- 550 MHz Bandwidth for Data Applications, Fast Ethernet and 155Mbps TP-PMD/CDDI
- Galvanized Steel Messenger
- Easily Identified Color-Striped Pairs
- 23 AWG Solid Copper Conductors
- Exceeds ANSI/TIA-568.2-D and ISO/IEC 11801 Transmission Performance Specifications
- Outdoor- and UV-Resistant Jacket Material
- ETL-listed, RoHS Compliant
- 1000 ft Wooden Spool

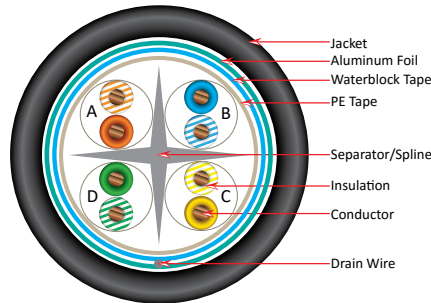
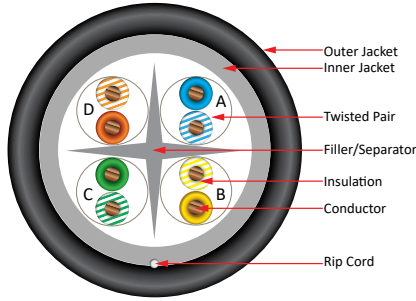
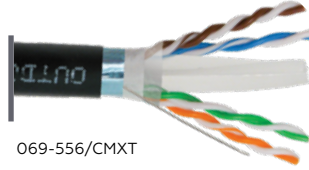
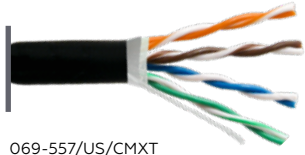


Aerial Applications



# CAT6 Cable ▶ CAT6 Outdoor

## CAT6 Direct Burial, CMX (DOUBLE JACKET) - Unshielded & Shielded

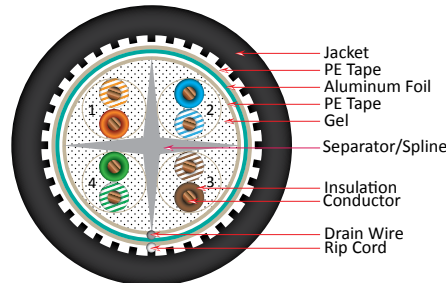
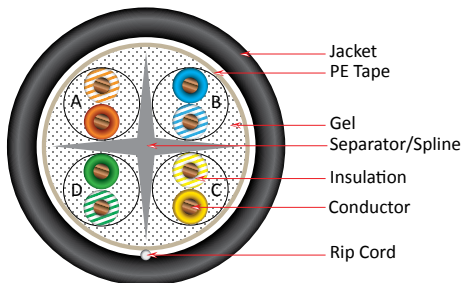
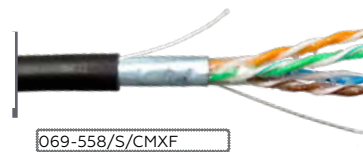
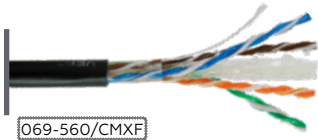


Item #	Description
069-557/US/CMXT	CAT6 CMX Direct Burial, UTP <b>Unshielded</b> , Double Jacket, LLDPE Jacket, 23 AWG, Solid, 1000 ft, Wooden Spool, Black - 600 MHz
069-561/CMXT	CAT6 CMX, Direct Burial, LLDPE Jacket, F/UTP <b>Shielded</b> , 23 AWG, Double Jacket, 1000 ft Wooden Spool, Black - 550 MHz
069-556/CMXT2K	CAT6 CMX, Direct Burial, LLDPE Jacket, F/UTP <b>Shielded</b> , 23 AWG, Double Jacket, <b>2000 FT</b> Wooden Spool, Black - 550 MHz
069-561/CMXT	CAT6 CMX Direct Burial, F/UTP <b>Shielded</b> , Waterproof (Dual Jacket) LLDPE Jacket, 23 AWG, Solid, 1000 ft Wooden Spool, Black - 550 MHz

### Features:

- Fast Ethernet and 155Mbps TP-PMD/CDDI
- Easily Identified Color-Striped Pairs
- 23 AWG Solid Copper Conductors
- Exceeds ANSI/TIA-568.2-D and ISO/IEC 11801 Transmission Performance Specifications
- Outdoor- and UV-Resistant Jacket Material
- ETL-listed, RoHS Compliant
- Wooden Spool

## CAT6 Direct Burial, CMX (GEL-FLOODED CORE) - Unshielded & Shielded



Item #	Description
069-560/CMXF	CAT6 CMXF Direct Burial, 550 MHz Bandwidth for Data Applications, Gel-Flooded Core, <b>Unshielded</b> , 23 AWG, Solid, Black
069-558/S/CMXF	CAT6 CMXF Direct Burial, 550 MHz Bandwidth, Gel-Flooded Core, <b>Shielded</b> , Drain Wire, 23 AWG, Black

### Features:

- Gel-Flooded Core
- Outdoor- and UV-Resistant Jacket Material
- Easily Identified Color-Striped Pairs
- 23 AWG Solid Copper Conductors
- Exceeds ANSI/TIA-568.2-D and ISO/IEC 11801 Transmission Performance Specifications
- ETL-listed, RoHS Compliant
- 1000 ft Wooden Spool

TWISTED-PAIR SYSTEMS

<b>CAT5E</b>		
	<b>UTP (Unshielded)</b>	<b>F/UTP (Shielded)</b>
<b>CMP (Plenum)</b>	156 Series (ETL) - USA 157 Series (UL) - USA	057-XXX/S/P/XX (UL) - TAA
<b>CMR (Riser)</b>	151 Series (ETL) - TAA	057-XXX/S/XX
<b>Multipair</b>	054 Series (ETL) (25- & 50-pair)	057-48X/S/XX (25-pair)
<b>Outdoor (UV Jacket)</b>		
CMX	059-484/CMX 059-484/CMX/WH 059-484/CMX/GY 059-488/WS/CMX 059-491/CMX2K	059-501/S/CMX (ETL)
with Messenger	059-497/MESG	059-498/S/MESG
<b>Direct Burial</b>		
CMX - Double jacket	059-486/US/CMXT	059-486/CMXT 059-490/WS/CMXT (ETL) 059-493/CMXT2K
CMX - Gel-flooded core	059-485/CMXF 059-489/WS/CMXF 059-488/CMXF25P (25-pair)	059-487/S/CMXF
CMX - Cell Towers		059-494/WS/CWT 059-494/RB/CWT 059-495/S1/CWT 059-496/S2/CWT

**Part Number Anatomy:**

XXX-XXX/S/XX - Shielded  
 XXX-XXX/US/XXXX - Unshielded  
 XXX-XXX/S/P/XX - Plenum-Rated, Shielded  
 XXX-XXX/CMXT - CMX (double jacket)  
 XXX-XXX/CMXF - CMX (gel-flooded core)  
 XXX-XXX/WS/XXX - Wooden Spool  
 XXX-XXX/RB/XXX - Reel in Box

XXX-XXX/XXXX25P - 25-Pair  
 XXX-XXX/XXXX2K - 2000 ft  
 XXX-XXXX/A/XX - CAT6a  
 XXX-XXX/P/XX - Plenum-Rated  
 XXX-XXX/BK - Color (in this case Black)  
 Other colors: BL (blue), GR (green), GY (gray), OR (orange),  
 PK (pink), PR (purple), RD (red), WH (white), YL (yellow)

**Other Outdoor & Direct Burial Cables by Vertical Cable:**

**AUDIO CABLE**  
 12, 14, 16, 18 Gauge  
 2, 4 Conductors  
  
 209 Series with "DB"  
 in description

**COAXIAL CABLE**  
 RG11, RG59, RG59 Siamese,  
 RG6 Siamese, RG6 Quad Shield  
 107 Series with "DB" in description

**CATEGORY CABLES**  
 CMX Double Jacket (CMXT)  
 CMX Gel-Flooded Core (CMXF)  
 Outdoor cable, UV Jacket (CMX)  
 059, 069 Series  
 Multipair cable

# CAT5E Cable ▶ CAT5E Plenum

## CAT5E CMP Plenum-Rated UTP - Made in USA

**MADE IN USA**

1000 ft



500 ft



Item #	Description	Item #	Description
156-200/P/BK	1000 ft, Black	156-510/P/5BK	500 ft, Black
156-201/P/BL	1000 ft, Blue	156-511/P/5BL	500 ft, Blue
156-202/P/GR	1000 ft, Green	156-512/P/5GR	500 ft, Green
156-203/P/GY	1000 ft, Gray	156-513/P/5GY	500 ft, Gray
156-204/P/OR	1000 ft, Orange	156-514/P/5OR	500 ft, Orange
156-205/P/PK	1000 ft, Pink	156-515/P/5PK	500 ft, Pink
156-206/P/PR	1000 ft, Purple	156-516/P/5PR	500 ft, Purple
156-207/P/RD	1000 ft, Red	156-517/P/5RD	500 ft, Red
156-208/P/WH	1000 ft, White	156-518/P/5WH	500 ft, White
156-209/P/YL	1000 ft, Yellow	156-519/P/5YL	500 ft, Yellow



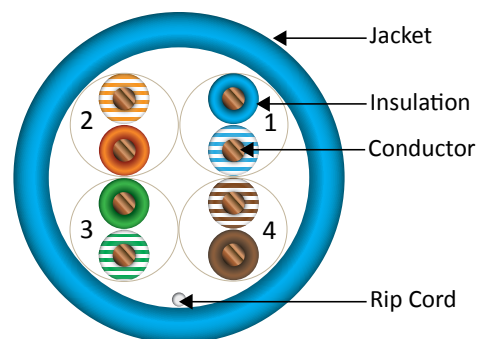
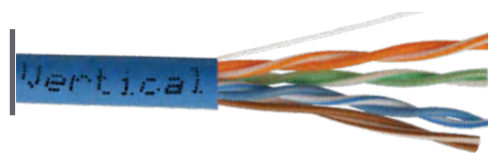
1000 ft



500 ft



Item #	Description	Item #	Description
157-300/P/BK	1000 ft, Black	157-610/P/5BK	500 ft, Black
157-301/P/BL	1000 ft, Blue	157-615/P/5BL	500 ft, Blue
157-302/P/GR	1000 ft, Green	157-620/P/5GR	500 ft, Green
157-303/P/GY	1000 ft, Gray	157-625/P/5GY	500 ft, Gray
157-304/P/OR	1000 ft, Orange	157-630/P/5OR	500 ft, Orange
157-305/P/PK	1000 ft, Pink	157-635/P/5PK	500 ft, Pink
157-306/P/PR	1000 ft, Purple	157-640/P/5PR	500 ft, Purple
157-307/P/RD	1000 ft, Red	157-645/P/5RD	500 ft, Red
157-308/P/WH	1000 ft, White	157-650/P/5WH	500 ft, White
157-309/P/YL	1000 ft, Yellow	157-655/P/5YL	500 ft, Yellow



# CABLE THAT "PULLS LIKE BUTTER"

### Features:

- 4-Pair Unshielded Twisted-Pair (UTP) Construction
- Plenum Fire Safety Rating (CMP)
- 24 AWG Bare Copper Conductors
- Easy-to-See Vivid-Color Conductor Insulation and Cable Jacket
- Moisture-Resistant Box equipped with easy-to-pull tube
- Supports High-Speed Data Applications, Fast Ethernet and 155-Mbit/s TP-PMD/CDDI
- Supports High-Speed Data Applications up to 1 Gbit/s
- Excellent Insertion Loss and Crosstalk Characteristics
- ETL-listed, ETL-Verified Channel, RoHS-Compliant (156 Series)
- UL-Listed, RoHS-Compliant (157 Series)
- Covered by 25-Year Warranty
- Made in the USA
- Packaging: 500 ft & 1000 ft Pull Box

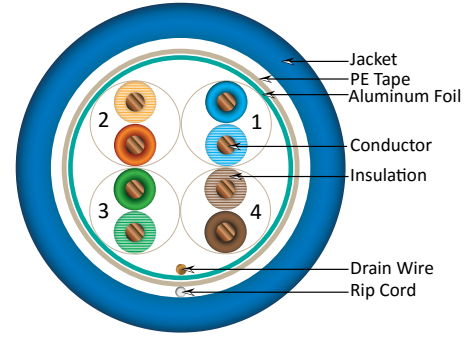
**Virtual Realty Experience**  
(get inside of the box)



TWISTED-PAIR SYSTEMS

# CAT5E Cable ▶ CAT5E CAT5E Plenum F/UTP

TWISTED-PAIR SYSTEMS



Item #	Description
057-479/S/P/BL	CAT5E 350 MHz Cable, Plenum/Shielded, 24 AWG, F/UTP, 1000 ft, Pull Box, TAA-Compliant, UL & ETL-listed, Blue
057-480/S/P/GY	CAT5E 350 MHz Cable, Plenum/Shielded, 24 AWG, F/UTP, 1000 ft, Pull Box, TAA-Compliant, UL & ETL-listed, Gray
057-481/S/P/WH	CAT5E 350 MHz Cable, Plenum/Shielded, 24 AWG, F/UTP, 1000 ft, Pull Box, TAA-Compliant, UL & ETL-listed, White
057-482/S/P/BK	CAT5E 350 MHz Cable, Plenum/Shielded, 24 AWG, F/UTP, 1000 ft, Pull Box, TAA-Compliant, UL & ETL-listed, Black
057-483/S/P/GR	CAT5E 350 MHz Cable, Plenum/Shielded, 24 AWG, F/UTP, 1000 ft, Pull Box, TAA-Compliant, UL & ETL-listed, Green
057-484/S/P/YL	CAT5E 350 MHz Cable, Plenum/Shielded, 24 AWG, F/UTP, 1000 ft, Pull Box, TAA-Compliant, UL & ETL-listed, Yellow

### Features:

- Overall Foil-Shielded Twisted-Pair (F/UTP) Construction
- Plenum Fire Safety Rating (CMP)
- 24 AWG Bare Copper Conductors
- Easy-to-See Vivid-Color Conductor Insulation & Jacket
- Exceeds ANSI/TIA-568.2-D and ISO/IEC 11801 Transmission Performance Specifications
- UL-Listed, RoHS-Compliant
- Designed in the USA, Imported Product (TAA-Compliant)
- Packaging: 1000-ft Pull Box

### With CAT5E Cables Our Customers usually buy these products:



J Hook



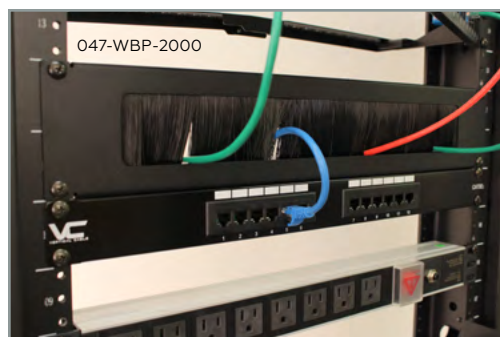
Keystone Jack



Surface Mount Boxes



Velcro Tie Wrap



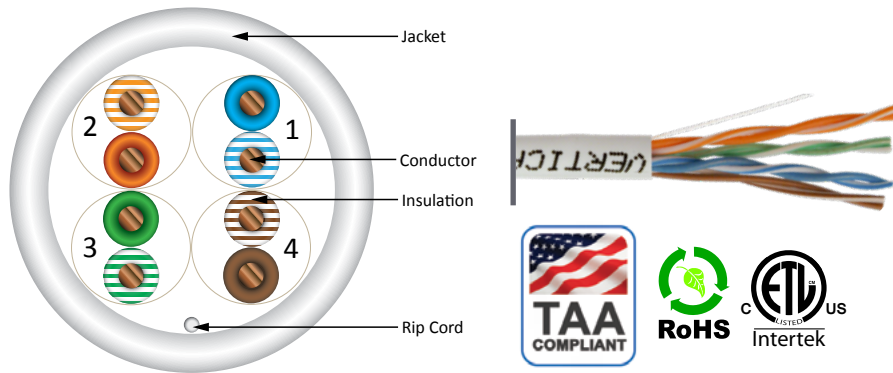
Brush Type Panel



Vertical Cable Manager

# CAT5E Cable ▶ CMR

## CAT5E CMR UTP - TAA-Compliant

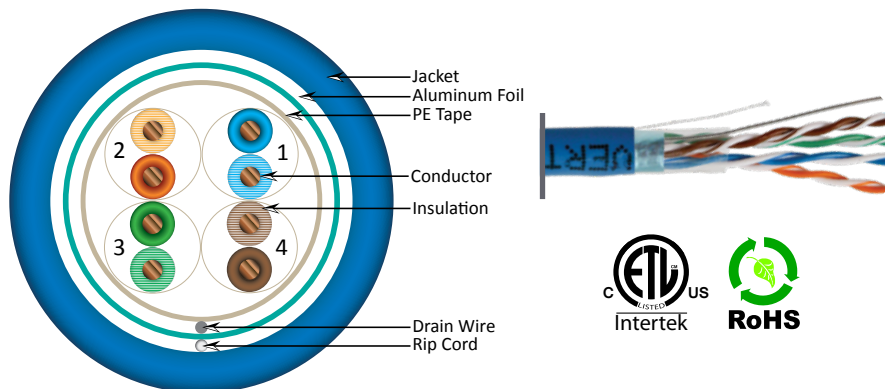


### Features:

- 4-Pair Unshielded Twisted-Pair (UTP) Construction
- Riser Fire Safety Rating (CMR)
- 24 AWG Bare Copper Conductors
- Easy-to-See Vivid-Color Conductor Insulation and Cable Jacket
- Moisture-Resistant Box equipped with easy-to-pull tube
- Supports High-Speed Data Applications, Fast Ethernet and 155-Mbit/s TP-PMD/CDDI
- Supports High-Speed Data Applications up to 1 Gbit/s
- ETL-listed, ETL-Verified Channel, RoHS-Compliant
- Covered by 25-Year Warranty
- Designed in the USA, Imported Product - TAA-Compliant (Made in South Korea)
- Packaging: 1000 ft Pull Box

Item #	Description
151-101/BK	CAT5E CMR, UTP, 1000 ft, Black
151-102/BL	CAT5E CMR, UTP, 1000 ft, Blue
151-103/GR	CAT5E CMR, UTP, 1000 ft, Green
151-104/GY	CAT5E CMR, UTP, 1000 ft, Gray
151-105/OR	CAT5E CMR, UTP, 1000 ft, Orange
151-106/PK	CAT5E CMR, UTP, 1000 ft, Pink
151-107/PR	CAT5E CMR, UTP, 1000 ft, Purple
151-108/RD	CAT5E CMR, UTP, 1000 ft, Red
151-109/WH	CAT5E CMR, UTP, 1000 ft, White
151-110/YL	CAT5E CMR, UTP, 1000 ft, Yellow

## CAT5E CMR F/UTP

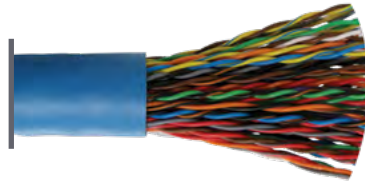


Item #	Description
057-468/S/BK	CAT5E, F/UTP, 1000 ft, Black
057-469/S/BL	CAT5E, F/UTP, 1000 ft, Blue
057-470/S/GR	CAT5E, F/UTP, 1000 ft, Green
057-471/S/GY	CAT5E, F/UTP, 1000 ft, Gray
057-476/S/OR	CAT5E, F/UTP, 1000 ft, Orange
057-472/S/PR	CAT5E, F/UTP, 1000 ft, Purple
057-473/S/RD	CAT5E, F/UTP, 1000 ft, Red
057-474/S/WH	CAT5E, F/UTP, 1000 ft, White
057-475/S/YL	CAT5E, F/UTP, 1000 ft, Yellow

### Features:

- Overall Foil-Shielded Twisted-Pair (F/UTP) Construction
- Riser Fire Safety Rating (CMR)
- 24 AWG Bare Copper Conductors
- Easy-to-See Vivid-Color Conductor Insulation and Cable Jacket
- Moisture-Resistant Box equipped with easy-to-pull tube
- Supports High-Speed Data Applications, Fast Ethernet and 155-Mbit/s TP-PMD/CDDI
- Supports High-Speed Data Applications up to 1 Gbit/s
- ETL-listed, RoHS-Compliant
- Packaging: 1000 ft Pull Box

## CAT5E Cable ▶ CAT5E Multipair CAT5E 25, 50 Pair Power Sum (UTP)

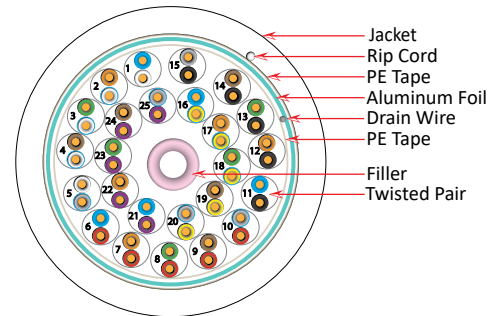
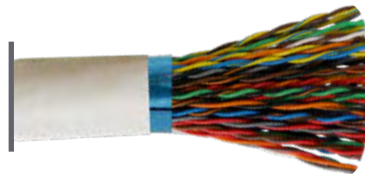


Item #	Description
054-454BL	CAT5E 25 Pair Power Sum, PVC Jacket, 24 AWG, Blue
054-453GY	CAT5E 25 Pair Power Sum, PVC Jacket, 24 AWG, Gray
054-452WH	CAT5E 25 Pair Power Sum, PVC Jacket, 24 AWG, White
<b>054-455/BL</b>	<b>CAT5E 50 Pair Power Sum, PVC Jacket, 24 AWG, Blue</b>
<b>054-456/WH</b>	<b>CAT5E 50 Pair Power Sum, PVC Jacket, 24 AWG, White</b>

### Features:

- Unshielded Twisted Pair (UTP) Construction
- 24 AWG Bare Copper Conductors
- Easy-to-See Vivid-Color Conductor Insulation & Jacket
- Exceeds ANSI/TIA-568.2-D and ISO/IEC 11801 Transmission Performance Specifications
- ETL-listed, RoHS-Compliant
- Packaging: 1000 ft Wooden Spool

## CAT5E 25 Pair (F/UTP)

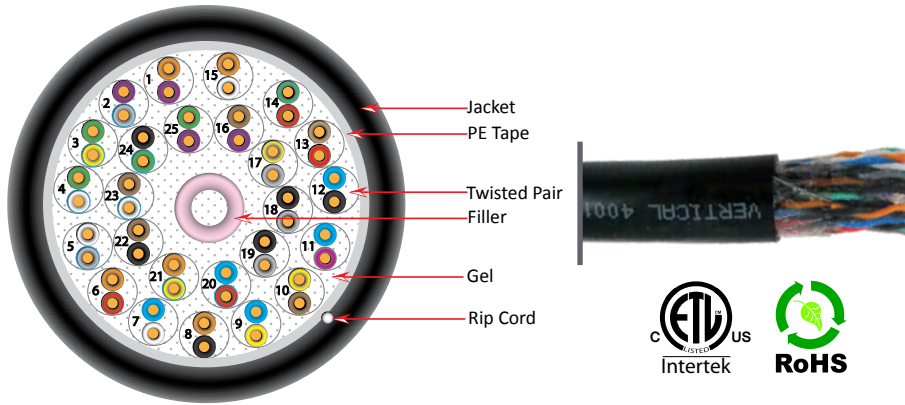


Item #	Description
057-486/S/BL	CAT5E 350 MHz Cable, 25 Pairs, Solid/Shielded, 24 AWG, F/UTP, 1000 ft Spool, Blue
057-487/S/WH	CAT5E 350 MHz Cable, 25 Pairs, Solid/Shielded, 24 AWG, F/UTP, 1000 ft Spool, White

### Features:

- Overall Foil-Shielded Twisted-Pair (F/UTP) Construction
- 24 AWG Bare Copper Conductors
- Easy-to-See Vivid-Color Conductor Insulation & Jacket
- Exceeds ANSI/TIA-568.2-D and ISO/IEC 11801 Transmission Performance Specifications
- ETL-listed, RoHS-Compliant
- Packaging: 1000 ft Wooden Spool

# CAT5E Cable ▶ CAT5E Outdoor CAT5E 25 Pair Direct Burial

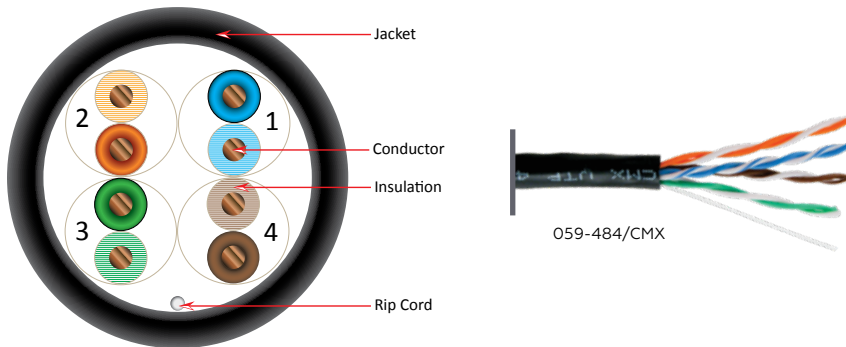


### Features:

- 25-Pair Unshielded Twisted Pair (UTP) Construction
- 24 AWG Bare Copper Conductors
- Easy-to-See Vivid-Color Conductor Insulation & Jacket
- Exceeds ANSI/TIA-568.2-D and ISO/IEC 11801 Transmission Performance Specifications
- Gel-Flooded Core
- Direct Burial Construction
- ETL-listed, RoHS-Compliant
- Packaging: 1000 ft Wooden Spool

Item #	Description
059-488/CMXF25P	CAT-5E CMXF Direct Burial, Gel-Flooded Core, 50-Conductor, 24 AWG Solid Bare Copper, Black

# CAT5E Outdoor Cable, CMX - UTP & F/UTP



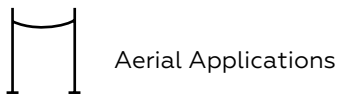
### Features:

- Outdoor- and UV-Resistant Jacket Material
- 24 AWG Bare Copper Conductors
- Easy-to-See Vivid-Color Conductor Insulation & Jacket
- Exceeds ANSI/TIA-568.2-D and ISO/IEC 11801 Transmission Performance Specifications
- ETL-listed, RoHS Compliant
- 1000 ft Pull Box or 2000 FT Wooden Spool

Item #	Description
059-484/CMX	CAT5E UV Jacket, UTP CMX Cable, 1000 ft Pull Box, Black
059-484/CMX/GY	CAT5E UV Jacket, UTP CMX Cable, 1000 ft Pull Box, Gray
059-484/CMX/WH	CAT5E UV Jacket, UTP CMX Cable, 1000 ft Pull Box, White
059-488/WS/CMX	CAT5E UV Jacket, UTP CMX Cable, 1000 ft Wooden Spool, Black
059-491/CMX2K	CAT5E UV Jacket, UTP CMX Cable, <b>2000 FT</b> Wooden Spool, Black

TWISTED-PAIR SYSTEMS

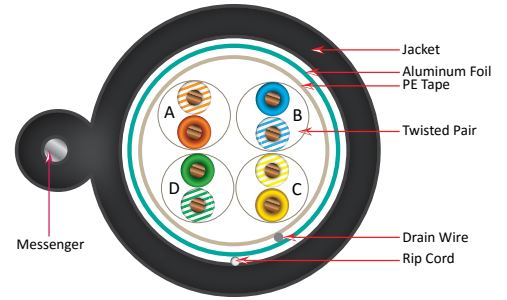
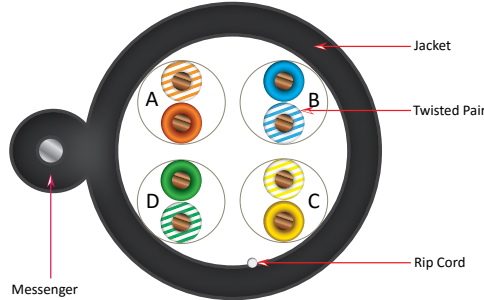
# CAT5E Outdoor Cable with Messenger for Aerial Applications



059-497/MESG



059-498/S/MESG

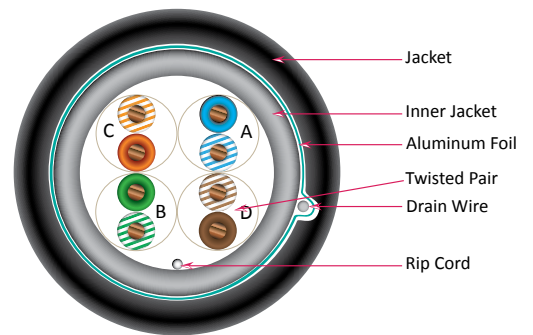
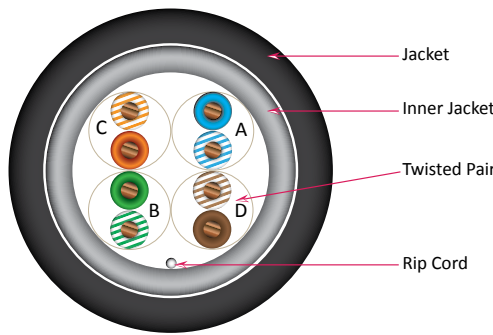
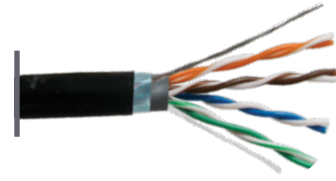
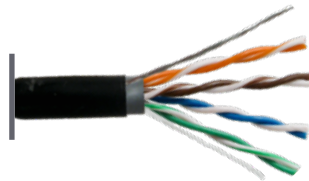


### Features:

- Galvanized Steel Messenger for Support
- Outdoor- and UV-Resistant Jacket Material
- Easily Identified Color-Striped Pairs
- 24 AWG Solid Copper Conductors
- Exceeds ANSI/TIA-568.2-D and ISO/IEC 11801 Transmission Performance Specifications
- ETL-listed, RoHS Compliant
- 1000 ft Wooden Spool

Item #	Description
059-497/MESG	CAT5E UTP, Outdoor-Rated Cable with Messenger, Aerial Applications, <b>Unshielded</b> , 24 AWG, 1000 ft, Wooden Spool
059-498/S/MESG	CAT5E F/UTP, Outdoor-Rated Cable with Messenger, Aerial Applications, <b>Shielded</b> , 24 AWG, 1000 ft, Wooden Spool

# CAT5E Direct Burial, CMX (DUAL JACKET) - UTP & F/UTP



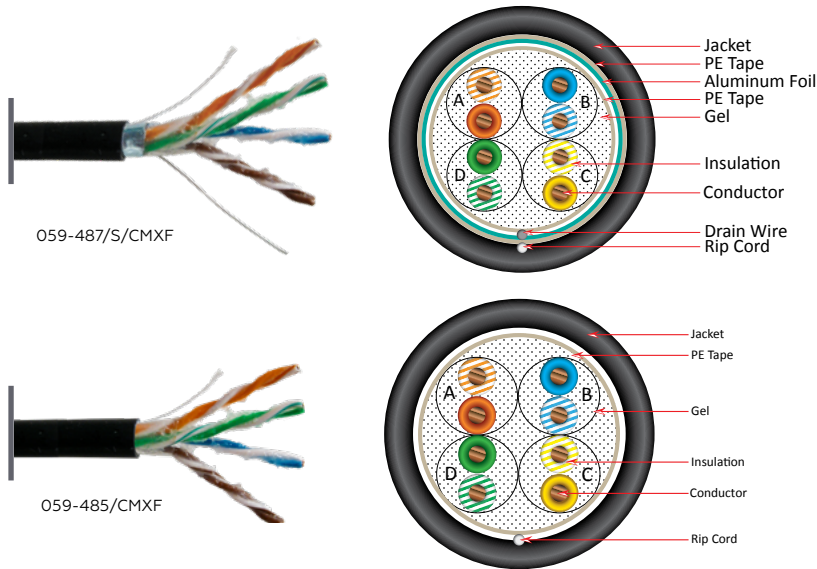
Item #	Description
059-486/US/CMXT	CAT5E Direct Burial, <b>Unshielded</b> , Dual Jacket, Waterproof, LSZH Outer Jacket, 1000 ft Pull Box, Black
059-486/CMXT	CAT5E Direct Burial, <b>Shielded</b> , Dual Jacket, Waterproof, LSZH Outer Jacket, 1000 ft Pull Box, Black
059-490/WS/CMXT	CAT5E Direct Burial, <b>Shielded</b> , Dual Jacket, Waterproof, LSZH Outer Jacket, 1000 ft Spool, Black
059-493/CMXT2K	CAT5E Direct Burial, <b>Shielded</b> , Waterblock Tape, Drain Wire, Dual Jacket, LSZH Outer Jacket, <b>2000 FT</b> , Spool, Black

### Features:

- Outdoor- and UV-Resistant Jacket Material
- Waterproof Dual Jacket
- 24 AWG Bare Copper Conductors
- Easy-to-See Vivid-Color Conductor Insulation & Jacket
- Exceeds ANSI/TIA-568.2-D and ISO/IEC 11801 Transmission Performance Specifications
- ETL-listed, RoHS-Compliant
- Packaging: 1000 ft Pull Box or 2000 FT Wooden Spool



# CAT5E Direct Burial, CMX (GEL-FLOODED CORE) - UTP, F/UTP

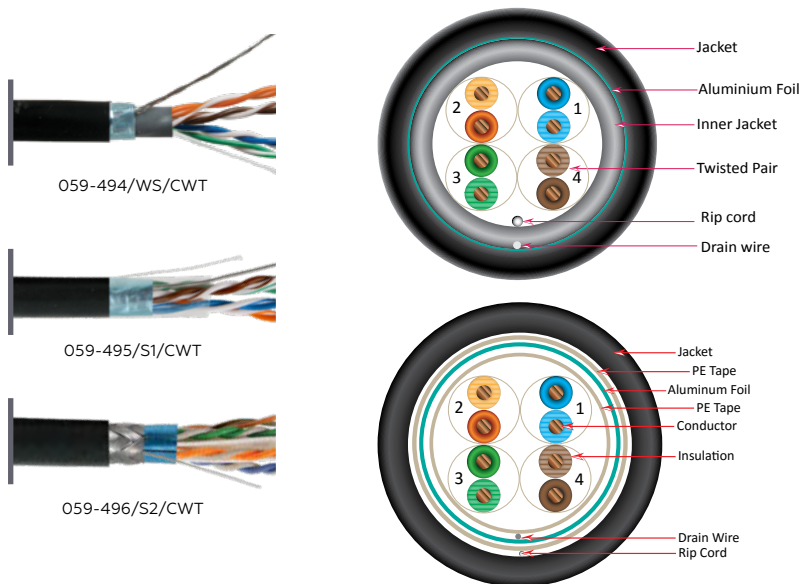


Item #	Description
059-485/CMXF	CAT5E Direct Burial, Gel-Flooded Core, <b>Unshielded</b> , 1000 ft, Pull Box, Black
059-489/WS/CMXF	CAT5E Direct Burial, Gel-Flooded Core, <b>Unshielded</b> , 1000 ft, Spool, Black
059-487/S/CMXF	CAT5E Direct Burial, Gel-Flooded Core, <b>Shielded</b> , Drain Wire, LLDPE Jacket, 1000 ft, Spool, Black

### Features:

- Outdoor- and UV-Resistant Jacket Material
- Gel-flooded core
- 24 AWG Bare Copper Conductors
- Easy-to-See Vivid-Color Conductor Insulation & Jacket
- Exceeds ANSI/TIA-568.2-D and ISO/IEC 11801 Transmission Performance Specifications
- ETL-listed, RoHS Compliant
- 1000 ft Pull Box or 2000 FT Wooden Spool

# CAT5E Outdoor Cable, Cell Tower Applications



Cell Tower Applications

Item #	Description
059-494/WS/CWT	CAT5E, Cell Tower Outdoor or Direct Burial, Dual Jacket, 1000 ft Wooden Spool, Black
059-494/RB/CWT	CAT5E, Cell Tower Outdoor or Direct Burial, Dual Jacket, 1000 ft Reel in Box, Black
059-495/S1/CWT	CAT5E, Cell Tower Outdoor, <b>Shielded</b> , Drain Wire, 1000 ft Wooden Spool, Black
059-496/S2/CWT	CAT5E, Cell Tower Outdoor, <b>Shielded</b> , 95% TC Braid, 1000 ft Wooden Spool, Black

### Features:

- Outdoor- and UV-Resistant Jacket Material
- 24 AWG Bare Copper Conductors
- Easy-to-See Vivid-Color Conductor Insulation & Jacket
- Exceeds ANSI/TIA-568.2-D and ISO/IEC 11801 Transmission Performance Specifications
- ETL-listed, RoHS-Compliant
- Packaging: 1000 ft Wooden Spool

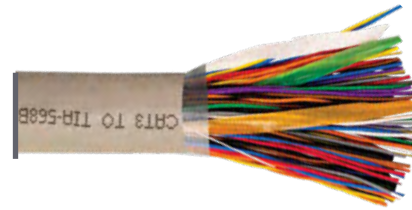
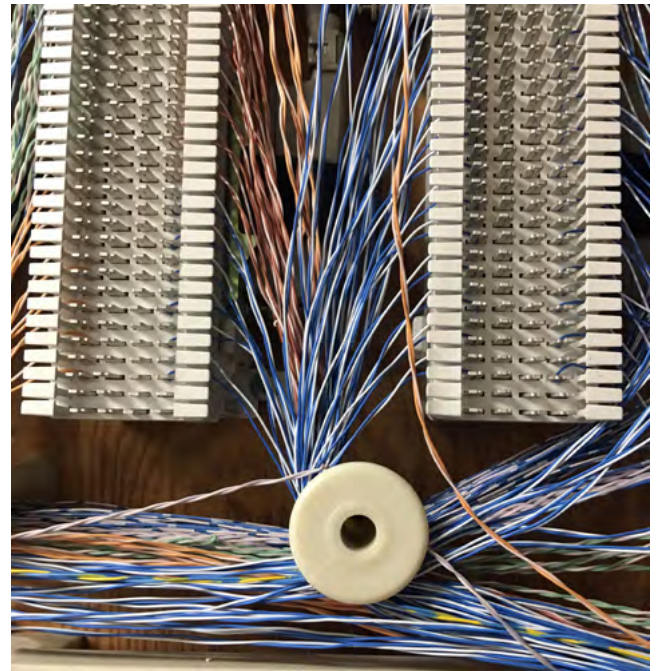
# CAT3 Solid 25, 50, 100 Pair CMR UTP

TWISTED-PAIR SYSTEMS

Item #	Description
052-441GY	CAT3 UTP, 24 AWG, 25-Pair, Gray
052-442GY	CAT3 UTP, 24 AWG, 50-Pair, Gray
052-443GY	CAT3 UTP, 24 AWG, 100-Pair, Gray

### Features:

- Multipair – Cabled together with varying layers
- 24 AWG Solid Bare Copper Conductors
- PE Tape, Rip Cord
- ETL-listed, RoHS Compliant
- Riser Fire Safety Rating (CMR)
- Supplied in 500 ft / 1000 ft



052-441GY  
25-pair



052-442GY  
50-pair



052-443GY  
100-pair

## Telephone Cords (Terminated)



**4C** 091-701/4C/7S



**6C** 091-710/6C/7S



Length	4 Conductor	6 Conductor
7 FT	091-701/4C/7S	091-710/6C/7S
14 FT	091-704/4C/14S	091-713/6C/14S
25 FT	091-707/4C/25S	091-716/6C/25S

### Features:

- PVC Jacket, Silver Satin
- 7-Strand CCA Conductors
- 6P4C (RJ11 Termination) and 6P6C (RJ12 Termination)
- RoHS Compliant
- Available in 7 FT, 14 FT, 25 FT
- Straight-through pinout

# CAT3 Cable ▶ Accessories

## Punch Down Blocks & Accessories



078-1025



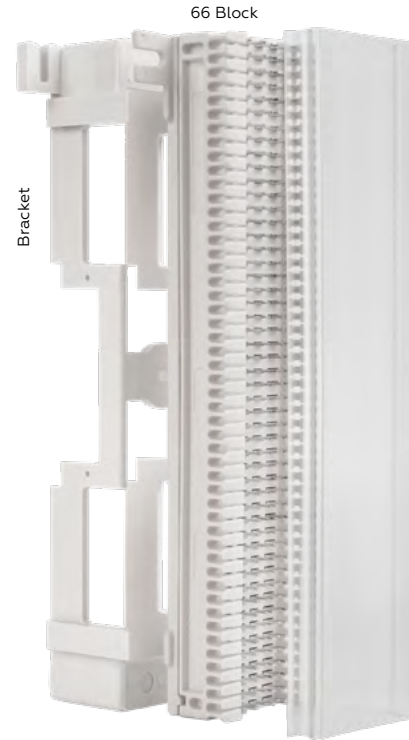
091-1P/CC/WB/B



043-SA1-100



048-120/WDS



66 Block

043-400/66K

Bracket

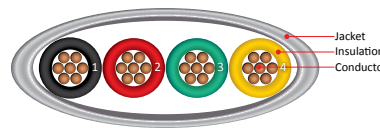
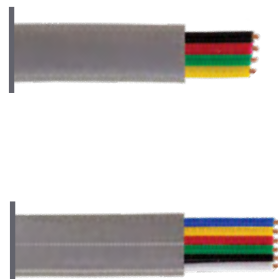
Cover

### Features:

- Blocks are the cost saving standards for phone system connections
- Covers and Clips Available
- Wire distribution spool nearly holds in place, guides and retains wires around punch-block installations; for use with CAT3/5E Multipair

Item #	Description
043-400/66K	66 Block, 50-Strip Punch down Block with Cover, Bracket and Labeling Strips
043-SA1-100	66 Block 2 Position Bridging Clip
048-120/WDS	Wire Distribution Spool, White
091-1P/CC/WB/B	Cross Connect Cable, 1 Pair, 1000 ft
078-1025	Impact punch down tool with 110/88/66 blade

## Telephone Wire: 4 & 6 Conductor (Not Terminated)



Item #	Description
091-719/4C/1K	Phone Cord, 6P4C, 28 AWG, Silver Satin, Stranded, 1000 FT Spool
091-722/6C/1K	Phone Cord, 6P6C, 28 AWG, Silver Satin, Stranded, 1000 FT Spool

### Features:

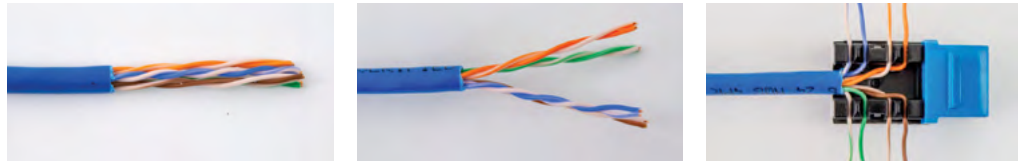
- PVC Jacket, Silver Satin
- 7-Strand CCA Conductors
- 4 Conductor (RJ11) & 6 Conductor (RJ12)
- RoHS Compliant
- 1000 FT Spool



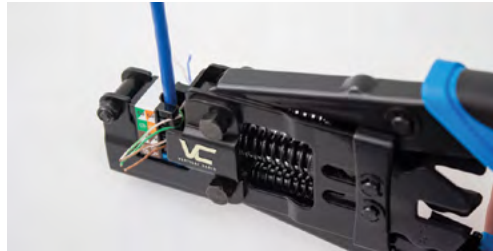
# I-Punch Tool for V-Max Keystone Jacks

**LIFETIME WARRANTY**  
**TAA-COMPLIANT**

078-2150



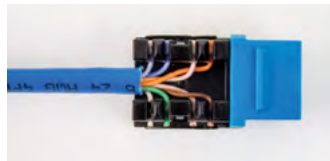
Remove up to 2 inches of the jacket from the cable with a cutter or a stripper. Separate all twisted pairs from each other. Preserve the wire pair twists as close as possible to the point of termination. Determine the wiring scheme and properly align all four cables accordingly on the jack. Keep the cable jacket as close to the connector as possible.



Insert prepared jack & cable assembly into the I-Punch Tool.



Firmly squeeze the handles together, release the handles and repeat this step to ensure a proper termination.



One punch - and done!



Enjoy nice clean cut, place a cap. Termination is complete.



## NOW AVAILABLE FOR VC SHIELDED KEYSTONE JACKS

301, 302, 303 Series



078-2155/S



**Compare White, Almond, Ivory and Gray colors (jacks match wall plates colors)**



WHITE

ALMOND

IVORY

GRAY

# V-Max Keystone Jacks ▶ CAT3, CAT5E, CAT6, CAT6a



Available in 25-Packs

**LIFETIME WARRANTY**  
**TAA-COMPLIANT**



TWISTED-PAIR SYSTEMS

## CAT5E

Item #	Description
351-V2612/AL	CAT5E V-Max, Almond
351-V2601/AL/25	CAT5E V-Max, 25-Pack, Almond
351-V2613/BK	CAT5E V-Max, Black
351-V2602/BK/25	CAT5E V-Max, 25-Pack, Black
351-V2614/BL	CAT5E V-Max, Blue
351-V2603/BL/25	CAT5E V-Max, 25-Pack, Blue
351-V2615/GR	CAT5E V-Max, Green
351-V2604/GR/25	CAT5E V-Max, 25-Pack, Green
351-V2616/GY	CAT5E V-Max, Gray
351-V2605/GY/25	CAT5E V-Max, 25-Pack, Gray
351-V2617/IV	CAT5E V-Max, Ivory
351-V2606/IV/25	CAT5E V-Max, 25-Pack, Ivory
351-V2618/OR	CAT5E V-Max, Orange
351-V2607/OR/25	CAT5E V-Max, 25-Pack, Orange
351-V2619/PR	CAT5E V-Max, Purple
351-V2608/PR/25	CAT5E V-Max, 25-Pack, Purple
351-V2620/RD	CAT5E V-Max, Red
351-V2609/RD/25	CAT5E V-Max, 25-Pack, Red
351-V2621/WH	CAT5E V-Max, White
351-V2610/WH/25	CAT5E V-Max, 25-Pack, White
351-V2622/YL	CAT5E V-Max, Yellow
351-V2611/YL/25	CAT5E V-Max, 25-Pack, Yellow

## Features:

Dimensions: 19.75 mm (H) x 17 mm (W) x 31.1 mm (D)  
0.78 in x 0.67 in x 1.22 in

Performance: meets or exceeds ANSI/TIA-568-2-D specifications

Wiring scheme: T568A/T568B

### Materials:

RJ45 Jacks: housing: ABS+PC, UL 94 V-0;  
110 IDC block: PC, UL 94 V-2;  
110 contacts: phosphor bronze with tin plating;  
socket contacts: phosphor bronze with 50-µin gold plating over nickel layer.  
PCB: FR4, UL 94 V-0.

### Mechanical:

Plug insertion force: 20 N (4.5 lbf);  
Plug retention force: 75 N (17 lbf);  
Plug mating life: 750 cycles min.

### Environmental:

Operating temperature: -10 °C to +60 °C

## CAT3

Item #	Description
350-V2506/IV	CAT3 Jack, Ivory
350-V2510/WH	CAT3 Jack, White

## CAT6

Item #	Description
352-V2712/AL	CAT6 V-Max, Almond
352-V2701/AL/25	CAT6 V-Max, 25-Pack, Almond
352-V2713/BK	CAT6 V-Max, Black
352-V2702/BK/25	CAT6 V-Max, 25-Pack, Black
352-V2714/BL	CAT6 V-Max, Blue
352-V2703/BL/25	CAT6 V-Max, 25-Pack, Blue
352-V2715/GR	CAT6 V-Max, Green
352-V2704/GR/25	CAT6 V-Max, 25-Pack, Green
352-V2716/GY	CAT6 V-Max, Gray
352-V2705/GY/25	CAT6 V-Max, 25-Pack, Gray
352-V2717/IV	CAT6 V-Max, Ivory
352-V2706/IV/25	CAT6 V-Max, 25-Pack, Ivory
352-V2718/OR	CAT6 V-Max, Orange
352-V2707/OR/25	CAT6 V-Max, 25-Pack, Orange
352-V2719/PR	CAT6 V-Max, Purple
352-V2708/PR/25	CAT6 V-Max, 25-Pack, Purple
352-V2720/RD	CAT6 V-Max, Red
352-V2709/RD/25	CAT6 V-Max, 25-Pack, Red
352-V2721/WH	CAT6 V-Max, White
352-V2710/WH/25	CAT6 V-Max, 25-Pack, White
352-V2722/YL	CAT6 V-Max, Yellow
352-V2711/YL/25	CAT6 V-Max, 25-Pack, Yellow

## CAT6a

Item #	Description
353-V2812/C6AAL	CAT6a V-Max, Almond
353-V2813/C6ABK	CAT6a V-Max, Black
353-V2814/C6ABL	CAT6a V-Max, Blue
353-V2815/C6AGR	CAT6a V-Max, Green
353-V2816/C6AGY	CAT6a V-Max, Gray
353-V2817/C6AIV	CAT6a V-Max, Ivory
353-V2818/C6AOR	CAT6a V-Max, Orange
353-V2819/C6APR	CAT6a V-Max, Purple
353-V2820/C6ARD	CAT6a V-Max, Red
353-V2821/C6AWH	CAT6a V-Max, White
353-V2822/C6AYL	CAT6a V-Max, Yellow



Orange



Gray



Black



Blue



Ivory



Almond



Green



White



Red



Yellow

# CAT5E, CAT6, CAT6a RJ45 Keystone Couplers - Unshielded

302-KCJ/BK



Front



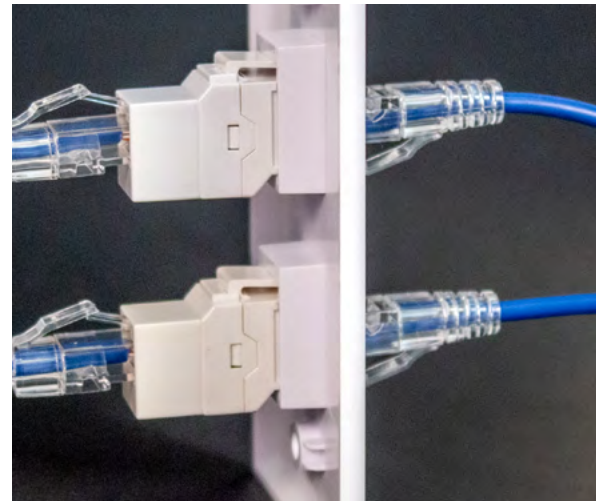
Back



301-KCJ/BL



302-KCJ/WH



TWISTED-PAIR SYSTEMS

Item #	Description
301-KCJ/BK	CAT5E Keystone Coupler, Unshielded, Black
301-KCJ/WH	CAT5E Keystone Coupler, Unshielded, White
301-KCJ/BL	CAT5E Keystone Coupler, Unshielded, Black
302-KCJ/BK	CAT6 Keystone Coupler, Unshielded, Blue
302-KCJ/WH	CAT6 Keystone Coupler, Unshielded, White
302-KCJ/BL	CAT6 Keystone Coupler, Unshielded, Blue
303-KCJ/S	CAT6a Keystone Coupler, Shielded

**Features:**

- Life (mating cycles): 750 cycles min
- Retention Strength: 75 N (17 lbf) between jack and plug
- Insertion Force: 30 N (6.7 lbf) max. (IEC 60603-7-4)
- 50-µm in gold plating

## CAT6a RJ45 Keystone Couplers - Shielded

Item #	Description
303-KCJ/S	CAT6a Keystone Coupler, Shielded



**Features:**

- Dimensions: 19.75 mm (H) x 17 mm (W) x 31.1 mm (D)  
0.78 in x 0.67 in x 1.22 in
- Performance: meets or exceeds ANSI/TIA-568-2-D specifications
- Wiring scheme: T568A/T568B
- Materials:
- RJ45 Jacks: housing: ABS+PC, UL 94 V-0; 110 IDC block: PC, UL 94 V-2; 110 contacts: phosphor bronze with tin plating; socket contacts: phosphor bronze with 50-µm in gold plating over nickel layer.
  - PCB: FR4, UL 94 V-0.
- Mechanical:
- Plug insertion force: 20 N (4.5 lbf);
  - Plug retention force: 75 N (17 lbf);
  - Plug mating life: 750 cycles min.
- Environmental:
- Operating temperature: -10 °C to +60 °C



Compatible with all blank Vertical Cable Patch Panels

Blank Shielded Patch Panels	P42
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## CAT6a IP20 Coupler Modules

Item #	Description
250-ICP20-C1A	Coupler Module, IDC-to-IDC Splice, Compact, CAT6A STP, Panel Mounting, IP20
250-ICP20-C2A	Coupler Module, IDC-to-IDC Splice, Standard, CAT6A STP, Panel Mounting, IP20

IP-RATED PRODUCTS	P160
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**CHARACTERISTICS**

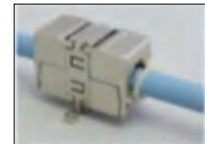
Transmission performance: category 6A per ANSI/TIA-568.2-D; category 6A per ISO IEC 11801.

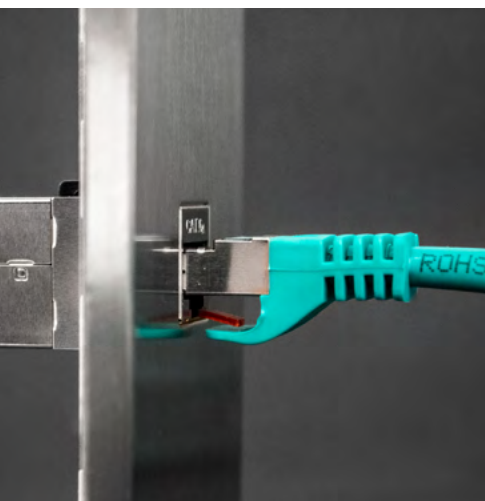
Wiring schemes: T568A/T568B.

Conductor gauge: solid: 22-26 AWG.

Environmental protection: IP20.

Housing: Zinc alloy, nickel plating





**Applications:**

- 10BASE-T Ethernet
- 155/622 Mbps ATM
- 4/16 Mbps Token Ring
- 100VG-Any LAN



**Item # Description**

301-J2630/S	CAT5E Shielded Jack
302-J2631/S	CAT6 Shielded Jack
303-J2637/C6AS	CAT6a Shielded Jack

- 360° Shielding Structure to prevent EMI
- 110/Krone Type Contacts (Terminal Block)
- UL-listed, ETL-listed, RoHS Compliant

**Features:**

**Dimensions:** 19.4 mm (H) x 21.0 mm (W) x 46.8 mm (D)  
0.76 in x 0.83 in x 1.84 in

**Performance:** meets or exceeds ANSI/TIA-568-2-D specifications  
**Wiring scheme:** T568A/T568B

**Materials:**

**RJ45 Jacks:** housing: zinc die-casting with nickel plating;  
110 IDC block: PC, UL 94 V-2;  
110 contacts: phosphor bronze with tin plating;  
socket contacts: phosphor bronze with 50-µin gold plating over nickel layer.  
**PCB:** FR4, UL 94 V-0.

**Mechanical:**

Plug insertion force: 30 N (6.7 lbf);  
Plug retention force: 75 N (17 lbf);  
Plug mating life : 750 cycles min.

**Electrical:**

Dielectric Strength: 1000 VRMS for 1 min;  
Insulation resistance: 10 MOhm min;  
Contact Resistance: 2 mOhm per contact max;  
Humidity: 93%;

**Environmental:**

Operating temperature: -10 °C to +60 °C.

**Punch-Down Tools**



078-1028



078-1025

**Our new I-Punch Tool for Shielded Jacks**

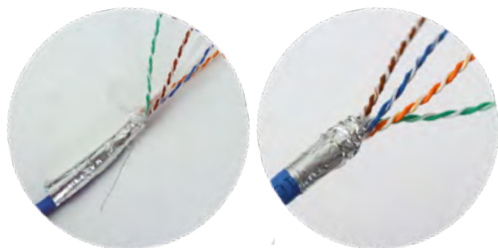


078-2155/S

Tools	P156
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## Termination Instructions for Shielded Keystone Jacks

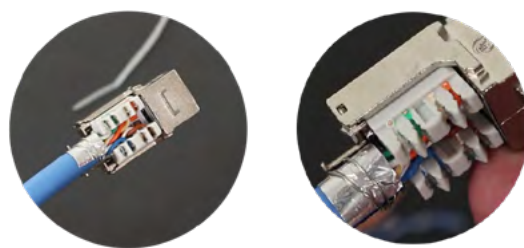
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2



3



■ Remove about 3 in. of cable sheath. Unfold and flatten screen foil, bend it back over cable sheath. Straighten drain wire and fold it back along cable sheath. Remove all non-conductive elements by cutting them flush with cable sheath edge. Wrap screen foil around cable sheath. Make sure foil is placed with its unlaminated surface facing outwards. Wrap drain wire around screen foil in a spiral manner.

Using a termination tool with 110/88/66 blade or I-Punch Tool for Shielded Keystone Jacks terminate cable's conductors.

■ Place conductors into termination slots according to wiring scheme colors and separate pairs using wedge protrusions on connecting block.

4



Place a cap. Use the zip tie and tighten and lock the cover to the housing.

## RJ45 inline Couplers CAT5E

## CAT6

## CAT6a



Item #	Description
040-362/C5/S	CAT5E RJ45 inline Coupler Extension, Shielded
040-364/C5/IV	CAT5E RJ45 inline Coupler Extension, Ivory
040-365/C5/WH	CAT5E RJ45 inline Coupler Extension, White
040-366/C6/S	CAT6 RJ45 inline Coupler Extension, Shielded
040-368/C6/IV	CAT6 RJ45 inline Coupler Extension, Ivory
040-369/C6/WH	CAT6 RJ45 inline Coupler Extension, White
040-370/C6A/S	CAT6a RJ45 inline Coupler Extension, Shielded

**Features:**

- RJ45 Female to RJ45 Female In-line Coupler
- Available Shielded and Unshielded
- UL-listed, ETL-listed, RoHS Compliant



## RJ45 Outdoor Waterproof – Shielded Couplers



Item #	Description
040-380/C5/OWP	CAT5E RJ45 Outdoor Waterproof – Shielded Coupler
040-381/C6/OWP	CAT6 RJ45 Outdoor Waterproof – Shielded Coupler
040-382/C6A/OWP	CAT6a RJ45 Outdoor Waterproof – Shielded Coupler

**Features:**

- Shielded RJ45 female to female coupler
- IP67 Rated - water and dust protection
- For harsh-industrial or outdoor environments
- RoHS Compliant

Thread cables to be connected through compression nuts and barrels.  
Place sealing gaskets on both ends of coupler.  
Insert plugs into coupler sockets until fully engaged.  
Screw barrels on coupler and tighten securely.

IP-RATED PRODUCTS	P160
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# Junction Boxes

## CAT5E - Junction Boxes



040-371/C5J/WH



040-371/C5J/WH



040-373/C5J/S



### Features:

- Compatible with 110 and Krone Termination Tools
- Screws, adhesive tape included
- Fire Retardant
- High-impact ABS construction
- Suitable for 22-26 AWG solid wire
- T568A and T568B color codes
- Shielded or Unshielded

### Item #

### Description

040-371/C5J/WH	CAT5E Junction Box, White, T568A and T568B Standards, Compatible with 110 & Krone Termination tools
040-373/C5J/S	CAT5E Shielded Junction Box, T568A and T568B Standards, Compatible with 110 & Krone Termination tools

## CAT6 - Junction Boxes



040-372/C6J/WH



040-374/C6J/S



### Features:

- Compatible with 110 and Krone Termination Tools
- Screws, adhesive tape included
- Fire Retardant
- High-impact ABS construction
- Suitable for 22-26 AWG solid wire
- T568A and T568B color codes
- Shielded or Unshielded

### Item #

### Description

040-372/C6J/WH	CAT6 Junction Box, White, T568A and T568B Standards, Compatible with 110 & Krone Termination tools
040-374/C6J/S	CAT6 Shielded Junction Box, T568A and T568B Standards, Compatible with 110 & Krone Termination tools



# Surface Mount Boxes ▶ Surface Mount Box Housing

## Surface Mount Boxes - 1, 2, 4 and 6 Ports - Blank

TWISTED-PAIR SYSTEMS

Item #	Description
039-356AL	1-Port, Surface Mount Box, Almond
039-357IV	1-Port, Surface Mount Box, Ivory
039-358WH	1-Port, Surface Mount Box, White
039-359AL	2-Port, Surface Mount Box, Almond
039-360IV	2-Port, Surface Mount Box, Ivory
039-361WH	2-Port, Surface Mount Box, White
039-362IV	4-Port, Surface Mount Box, Ivory
039-362WH	4-Port, Surface Mount Box, White
039-364IV	6-Port, Surface Mount Box, Ivory
039-365WH	6-Port, Surface Mount Box, White



039-358WH



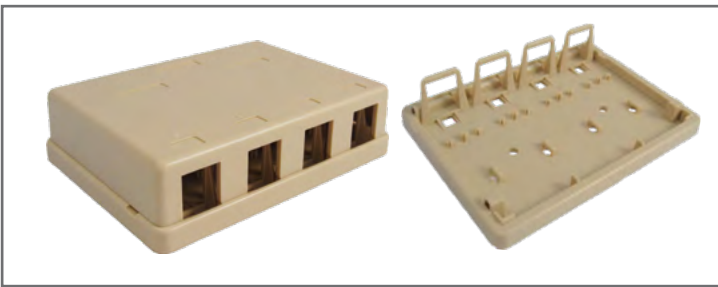
1-Port



039-359AL



2-Port



039-362IV



4-Port



039-365WH



6-Port

**Features:**

- Universal Surface Mount Box
- 1, 2, 4, or 6 Ports
- Unpopulated, compatible with the majority of Vertical Cable keystone modules
- Double-sided adhesive tape, screws and cable ties included
- Two piece construction
- Available in almond, ivory or white
- UL-listed RoHS Compliant



**Includes:**



Double-sided tape, screws, cable tie

### Easy to Install | Professional Look | Great Price & Quality



# Surface Mount Boxes ▶ Populated Surface-Mount Boxes

## Surface Mount Boxes - 1 and 2 Ports - With Jacks

TWISTED-PAIR SYSTEMS



### CAT5E

038-352WH

038-355WH



### CAT6

038-357WH

038-358IV



### CAT6a

038-C6A/1P/WH

038-C6A/2P/WH



### Features:



- High-impact ABS construction
- Screws, ties and double-sided adhesive tape included
- Gloss finish
- 110 connecting blocks
- CAT6a boxes are available in shielded construction only
- UL 94 V-0 Fire Retardant
- UL-listed

Item #	Description
038-351IV	1-Port SMB with CAT5E Jack, Ivory
038-352WH	1-Port SMB with CAT5E Jack, White
038-354IV	2-Port SMB with CAT5E Jack, Ivory
038-355WH	2-Port SMB with CAT5E Jack, White
038-356IV	1-Port SMB with CAT6 Jack, Ivory
038-357WH	1-Port SMB with CAT6 Jack, White
038-358IV	2-Port SMB with CAT6 Jack, Ivory
038-359WH	2-Port SMB with CAT6 Jack, White
038-C6A/1P/WH	1-Port SMB, Shielded with CAT6a Jack, White
038-C6A/2P/WH	2-Port SMB, Shielded with CAT6a Jack, White

### Related Products:



093-695/1YL



076-1053/7WH



077-2089/14WH



302-KJC/BL



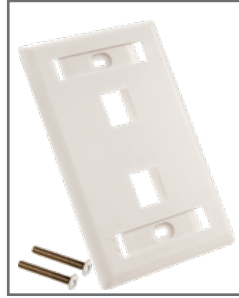
045-V12/8BK

## Keystone Wall Plates

### Standard Wall Plate with ID Window



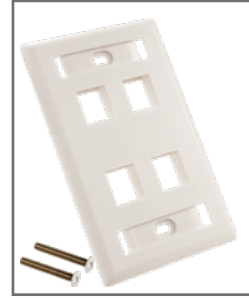
305-306ID/1P/IV



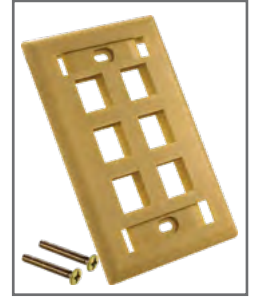
305-311ID/2P/WH



305-314ID/3P/IV



305-319ID/4P/WH



305-322ID/6P/IV

# of Ports	Ivory	White
1 Port	305-306ID/1P/IV	305-307ID/1P/WH
2 Port	305-310ID/2P/IV	305-311ID/2P/WH
3 Port	305-314ID/3P/IV	305-315ID/3P/WH
4 Port	305-318ID/4P/IV	305-319ID/4P/WH
6 Port	305-322ID/6P/IV	305-323ID/6P/WH

#### Features:

- High-impact ABS construction
- Comes with matching-color mounting screws
- Smooth finish
- Available in Ivory and White

## Mid-size Wall Plates

# of Ports	Item #	Description
0	304-M2725/0P/WH	Keystone Mid Size Wall Plate, 0-Port, White
1	304-M2726/1P/WH	Keystone Mid Size Wall Plate, 1-Port, White
2	304-M2727/2P/WH	Keystone Mid Size Wall Plate, 2-Port, White
3	304-M2728/3P/WH	Keystone Mid Size Wall Plate, 3-Port, White
4	304-M2729/4P/WH	Keystone Mid Size Wall Plate, 4-Port, White
6	304-M2730/6P/WH	Keystone Mid Size Wall Plate, 6-Port, White

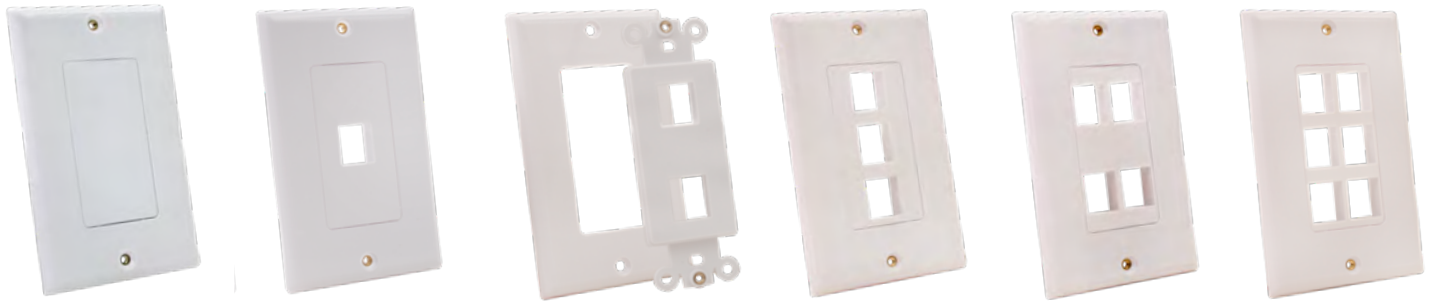


MID SIZE WALL PLATES 0-6 PORT

WILL COVER "OOPS" MOMENTS

# Keystone Wall Plates

## Decora Style Wall Plates



# of Ports	Item #	Description
0	308-603D/0P/WH	Keystone Wall Plate, 0-Port, Decora Style
1	308-607D/1P/WH	Keystone Wall Plate, 1-Port, Decora Style
2	308-611D/2P/WH	Keystone Wall Plate, 2-Port, Decora Style
3	308-615D/3P/WH	Keystone Wall Plate, 3-Port, Decora Style
4	308-619D/4P/WH	Keystone Wall Plate, 4-Port, Decora Style
6	308-623D/6P/WH	Keystone Wall Plate, 6-Port, Decora Style

### Features:

- Decora style
- Single-gang
- Compatible with the majority of keystone modules
- High-impact ABS construction
- UL 94 V-0 flame-retardant
- Smooth finish

## Standard Wall Plates

# of Ports	Almond	Black	Ivory	White	Gray
(0) Blank	304-J2628/0P/AL	-	304-J2629/0P/IV	304-J2630/0P/WH	304-J2660/0P/GY
1 Port	304-J2631/1P/AL	304-J2646/1P/BK	304-J2632/1P/IV	304-J2633/1P/WH	304-J2661/1P/GY
2 Port	304-J2634/2P/AL	304-J2647/2P/BK	304-J2635/2P/IV	304-J2636/2P/WH	304-J2662/2P/GY
3 Port	304-J2637/3P/AL	304-J2648/3P/BK	304-J2638/3P/IV	304-J2639/3P/WH	304-J2663/3P/GY
4 Port	304-J2640/4P/AL	304-J2649/4P/BK	304-J2641/4P/IV	304-J2642/4P/WH	304-J2664/4P/GY
6 Port	304-J2643/6P/AL	-	304-J2644/6P/IV	304-J2645/6P/WH	304-J2665/6P/GY
8 Port	-	-	-	304-2803/8P/WH	-
12 Port	-	-	-	304-2806/12P/WH	-



304-J2630/0P/WH

304-J2661/1P/GY

304-J2635/2P/IV

304-J2637/3P/AL

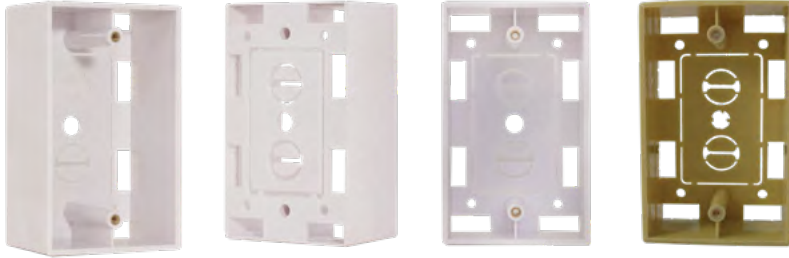
304-J2649/4P/BK

304-J2645/6P/WH

304-2803/8P/WH

304-2806/12P/WH

## Junction Boxes and Dry Wall Brackets Surface-mount Mounting Boxes



022-118WH

022-119IV

Item #	Description
022-117WH/D	Single Gang Junction Box, White 2.75(W)x4.5(H)x1.85(D)
022-118WH	Single Gang Junction Box, White 2.75(W)x4.5(H)x1.5(D)
022-119IV	Single Gang Junction Box, Ivory 2.75(W)x4.5(H)x1.5(D)

## Dry-Wall Brackets



022-118WH

022-DWB/1G

022-DWB/2G

022-MB/1G

022-MB/2G

Item #	Description
022-DWB/S	Single Gang Dry Wall Bracket for US Type Face Plate - Steel
022-DWB/1G	Single Gang Dry Wall Bracket for US Type Face Plate – Low Voltage Class 2
022-DWB/2G	Double Gang Dry Wall Bracket for US Type Face Plate – Low Voltage Class 2
022-MB/1G	Single Gang Mounting Bracket, Nail-on, Low Voltage Class 2
022-MB/2G	Double Gang Mounting Bracket, Nail-on, Low Voltage Class 2

Nail-on bracket Installs in 25% less time

## Feedthrough Wall Plates



307-503F/1G/WH

307-507F/2G/WH

307-511R/1G/WH

307-515R/2G/WH

307-520B/1G/WH

Item #	Description
307-503F/1G/WH	Feedthrough Wall Plate, Single Gang
307-507F/2G/WH	Feedthrough Wall Plate, Double Gang
307-511R/1G/WH	Feedthrough Recessed Wall Plate, Single Gang
307-515R/2G/WH	Feedthrough Recessed Wall Plate, Double Gang
307-520B/1G/WH	Feedthrough Wall Plate Brush Type, Decora Style



### Features:

- High-impact ABS construction
- Comes with matching-color mounting screws
- Smooth finish

# Keystone Wall Plates

## Standard Wall Plates - Stainless Steel



304-J2654/3P/S



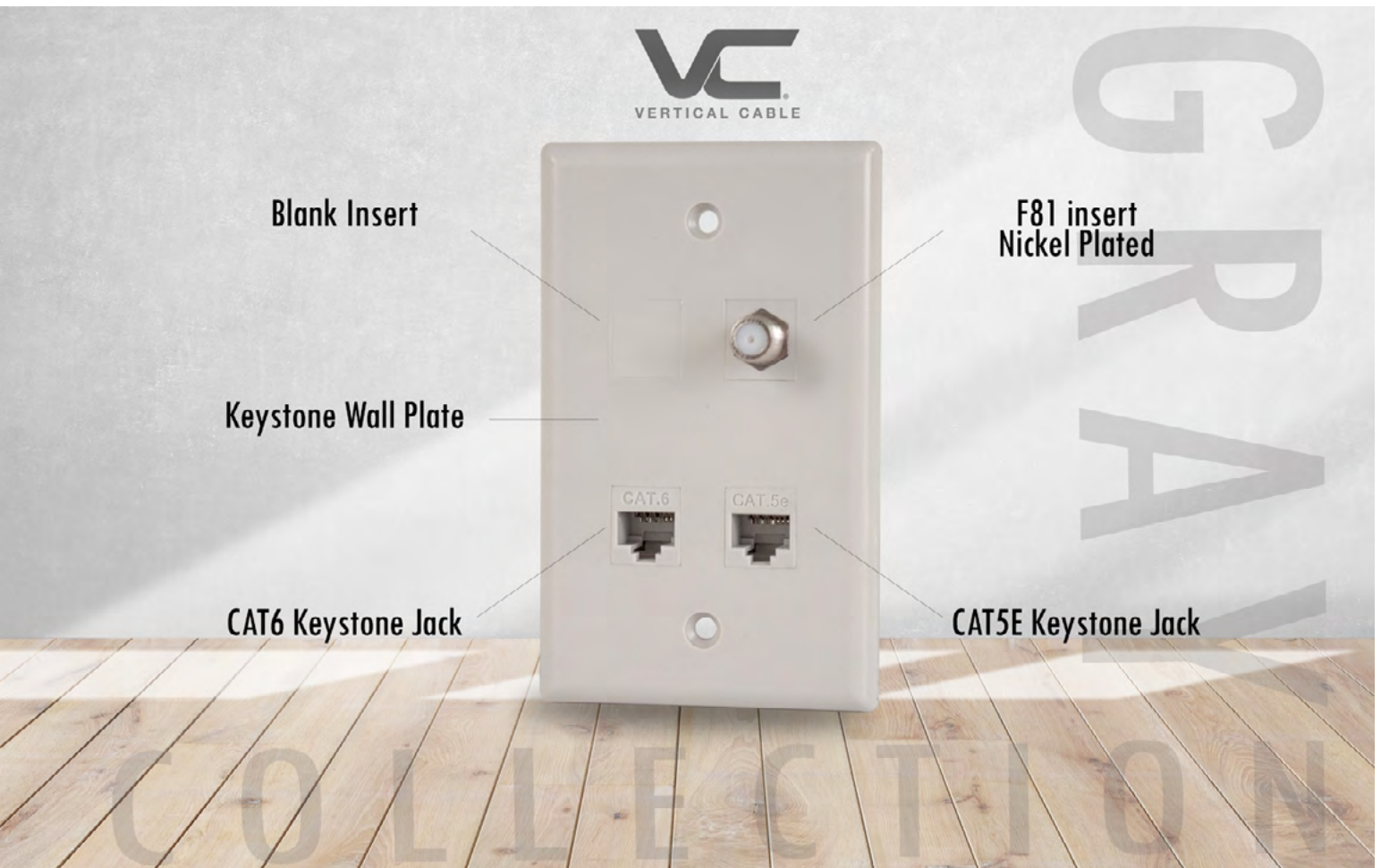
**Features:**

- Standard size, Single Gang
- Stainless steel brushed finish
- Rounded edges resist dust accumulation
- High-impact ABS

Item #	Description
304-J2651/0P/S	Stainless Steel Wall Plate, 0 Port
304-J2652/1P/S	Stainless Steel Wall Plate, 1 Port
304-J2653/2P/S	Stainless Steel Wall Plate, 2 Port
304-J2654/3P/S	Stainless Steel Wall Plate, 3 Port
304-J2655/4P/S	Stainless Steel Wall Plate, 4 Port

## Gray Collection by Vertical Cable

You asked - we delivered. Gray is in trend, so we brought an entire Gray Line: Wall Plates, Inserts, Keystone Jacks and even matching Patch Cords.



# Patch Panels ▶ CAT6 Patch Panels

## CAT6 Patch Panels

Front View

042-376/12



042-377/24



042-378/48



042-379/96



Back View



TWISTED-PAIR SYSTEMS

Item #	Description
042-376/12	CAT6, 110-IDC Patch Panel, 12 Port, Black
042-377/24	CAT6, 110-IDC Patch Panel, 24 Port, Black
042-378/48	CAT6, 110-IDC Patch Panel, 48 Port, Black
042-379/96	CAT6, 110-IDC Patch Panel, 96 Port, Black

Port Spacing 0.72 in (Brother label printer)  
0.71 in (Epson label printer)

**Features:**

- Performance:** meets or exceeds ANSI/TIA-568-2-D specifications
- Wiring scheme:** T568A/T568B
- Materials:**
  - Panel: 1.5 mm CRS, black powder coating.
  - RJ45 Jacks: housing: ABS, UL 94 V-0; 110 IDC block: PC, UL 94 V-2; 110 contacts: phosphor bronze with nickel plating; socket contacts: phosphor bronze with 50-µin gold plating over nickel layer.
  - Connecting blocks: housing: PC, glass-fiber reinforced, UL 94 V-2; 110 contacts: phosphor bronze with tin plating; PCB: FR4, UL 94 V-0.
  - Cable anchors: nylon.
- Mechanical:**
  - Plug insertion force: 20 N (4.5 lbf);
  - Plug retention force: 75 N (7.7 lbf);
  - Plug mating life : 750 cycles min.
  - 110 IDC durability: 250 terminations min
- Environmental:**
  - Operating temperature: -10 °C to +60 °C



**With This Product You May Need:**



Wall-Mounts  
047-WFM, WFJ Series



Punch-Down Tool, Stripper  
078-1028, 078-1023

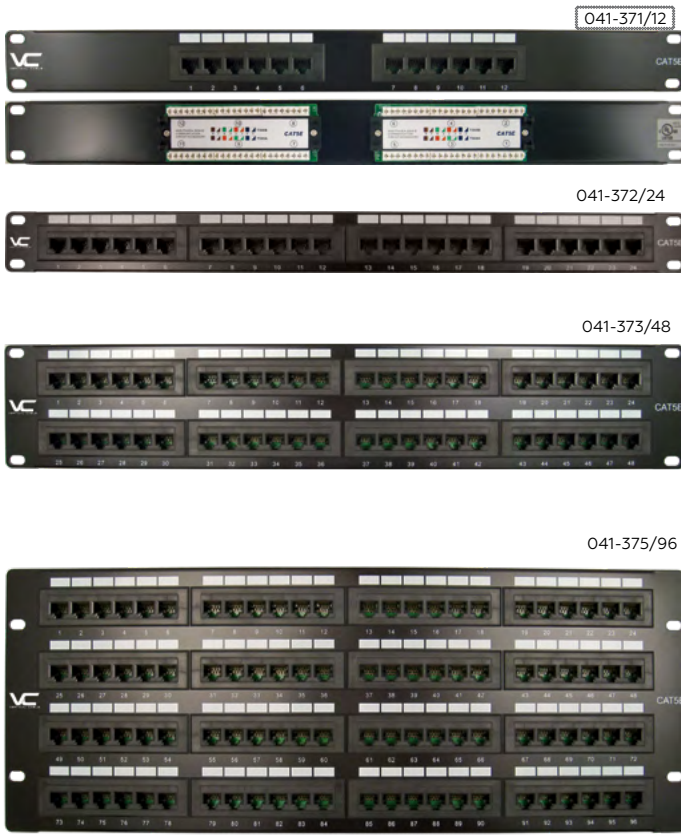


Tie Wraps, Velcro Wraps  
045 Series



# Patch Panels ▶ CAT5E Patch Panels

## CAT5E Patch Panels in 12, 24, 48 & 96 Port



Item #	Description
041-371/12	CAT5E, 110-IDC Patch Panel, 12 Port, Black
041-372/24	CAT5E, 110-IDC Patch Panel, 24 Port, Black
041-373/48	CAT5E, 110-IDC Patch Panel, 48 Port, Black
041-375/96	CAT5E, 110-IDC Patch Panel, 96 Port, Black

### Features:

Performance: meets or exceeds ANSI/TIA-568-2-D specifications  
 Wiring scheme: T568A/T568B  
 Materials:

- Panel: 1.5 mm CRS, black powder coating.
- RJ45 Jacks: housing: ABS, UL 94 V-0;  
 110 IDC block: PC, UL 94 V-2;  
 110 contacts: phosphor bronze with nickel plating;  
 socket contacts: phosphor bronze with 50-µin gold plating over nickel layer.
- Connecting blocks: housing: PC, glass-fiber reinforced, UL 94 V-2;  
 110 contacts: phosphor bronze with tin plating;  
 PCB: FR4, UL 94 V-0.
- Cable anchors: nylon.

Mechanical:

- Plug insertion force: 20 N (4.5 lbf);
- Plug retention force: 75 N (7.7 lbf);
- Plug mating life : 750 cycles min.
- 110 IDC durability: 250 terminations min

Environmental:

- Operating temperature: -10 °C to +60 °C



TWISTED-PAIR SYSTEMS

## CAT5E & CAT6, 12-Port Surface-Mount Mini Patch Panels



041-370M



042-2134



### Features:

Performance: meets or exceeds ANSI/TIA-568-2-D specifications  
 Wiring scheme: T568A/T568B  
 Materials:

- Panel: 1.5 mm CRS, black powder coating.
- RJ45 Jacks: housing: ABS, UL 94 V-0;  
 110 IDC block: PC, UL 94 V-2;  
 110 contacts: phosphor bronze with nickel plating;  
 socket contacts: phosphor bronze with 50-µin gold-plating over nickel layer.
- Connecting blocks: housing: PC, glass-fiber reinforced, UL 94 V-2;  
 110 contacts: phosphor bronze with tin plating;  
 PCB: FR4, UL 94 V-0.
- Cable anchors: nylon.

Mechanical:

- Plug insertion force: 20 N (4.5 lbf);
- Plug retention force: 75 N (7.7 lbf);
- Plug mating life : 750 cycles min.
- 110 IDC durability: 250 terminations min

Environmental:

- Operating temperature: -10 °C to +60 °C

Item #	Description
041-370M	CAT5E, 110-IDC 12 Port Mini Patch Panel, with Support Bracket, Black
042-2134	CAT6, 110-IDC 12 Port Mini Patch Panel, with Support Bracket, Black



# CAT5E Shielded Patch Panel, 24 & 48 Port

TWISTED-PAIR SYSTEMS



24 Port



48 Port

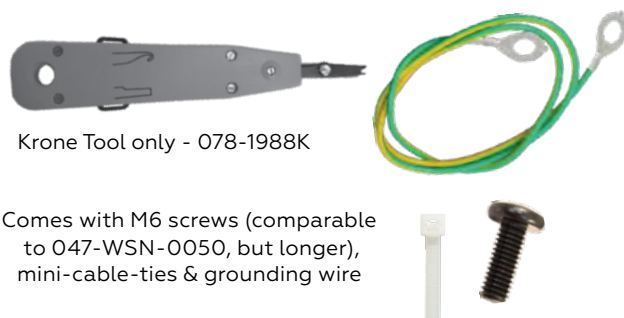


**Features:**

- Performance: meets or exceeds ANSI/TIA-568-2-D specifications T568A/T568B
- Wiring scheme:
- Materials:
  - Panel: 1.5 mm SECC, black/gray powder coating.
  - RJ45 Jacks: housing: PBT with 15% GF, UL 94 V-0; jack shield: bronze; 110 IDC block: PC with 5% GF, UL 94 V-2; 110 contacts: phosphor bronze with nickel plating; socket contacts: min 3 mm 50-µin gold plating over nickel layer.
- Connecting blocks: housing: PC, glass-fiber reinforced, UL 94 V-2; 110 contacts: phosphor bronze with tin plating; PCB: FR4, UL 94 V-0.
- Cable anchors: nylon.
- Ground wire: 18 AWG wire with Green/Yellow stripes, length 15.7 in (40 cm).
- Mechanical:
  - Plug insertion force: 900 gm for 8 contacts;
  - Plug retention force: 75 N (7.7 lbf);
  - Jack mating life : 750 cycles min. Insertion cycles at 20 cycles/minute max. Contact resistance test per 100 cycles
- Environmental:
  - Operating temperature: -10 °C to +60 °C

**Item # Description**

041-372/S/24	CAT5E, Shielded Krone type Patch Panel, 24 Port, Black
041-373/S/48	CAT5E, Shielded Krone type Patch Panel, 48 Port, Black



Krone Tool only - 078-1988K

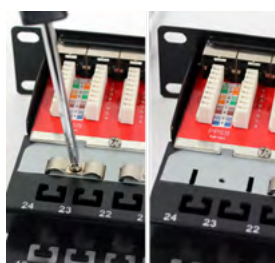
Comes with M6 screws (comparable to 047-WSN-0050, but longer), mini-cable-ties & grounding wire

## Termination instructions - Shielded Patch Panels (CAT5E, CAT6)

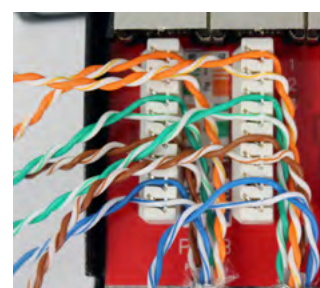
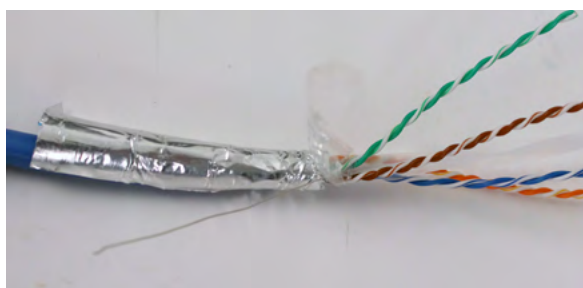
1



Unscrew and remove grounding clip. Then remove 4 in. of cable sheath (shorter lengths may make difficult handling cable's conductors and screening elements). In order to avoid damaging screen foil and drain wire, sheath should be cut half-way through. Bend sheath to break it, then remove.



2



For F/UTP cables:

- Unfold and flatten screen foil, bend it back over cable sheath.
- Straighten drain wire and fold it back along cable sheath.
- Remove all cable's internal non-conductive elements by cutting them flush with cable sheath edge.
- Wrap screen foil around cable sheath. Make sure foil is placed with its unlaminate surface facing outwards.
- Cut foil excess at a distance approximately 1 in. from cable sheath edge.
- Wrap drain wire around screen in a spiral manner.

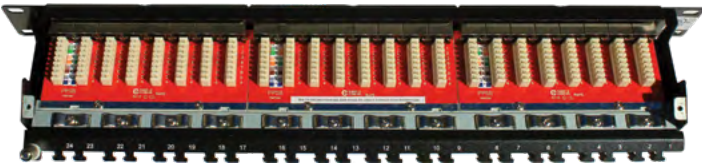
# CAT6 and CAT6a Shielded Patch Panels



24 Port



48 Port



Try our  
Vertical Wall-  
Mount Brackets,  
1-4 RMU  
**047-WVR Series**

Item #	Description
042-377/S/24	CAT6, Shielded Krone type Patch Panel, 24 Port, Black
042-378/S/48	CAT6, Shielded Krone type Patch Panel, 48 Port, Black
042-C6A/24	CAT6a, Shielded 24 Port, Krone Type, Patch Panel   1 RMU
042-C6A/48	CAT6a, Shielded 48 Port, Krone Type, Patch Panel   1 RMU

TWISTED-PAIR SYSTEMS

CAT5E: 24 Port (1 RMU) 041-372/S/24 and 48 Port (1 RMU) 041-373/S/48  
 CAT6: 24 Port (1 RMU) 042-377/S/24 and 48 Port (1 RMU) 042-378/S/48  
 CAT6a: 24 Port (1 RMU) 042-C6A/24 and 48 Port (1 RMU) 042-C6A/48

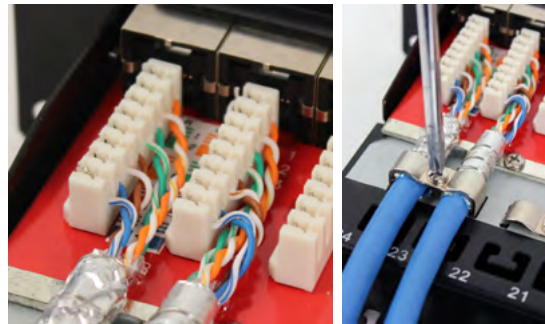
**3**



Place cable on grounding contact pad and align to ensure it comes into contact with cable screen portion with drain wire wrapped around it.

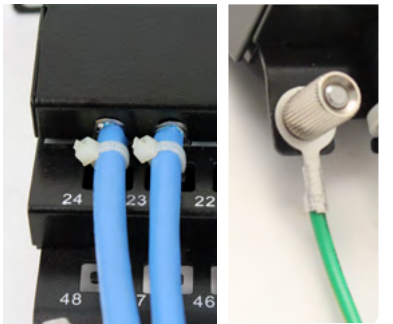
Place conductors into termination slots according to wiring scheme colors and separate pairs using wedge protrusions on connecting block.

**4**



Using Krone-type termination tool terminate cable's conductors. After terminating second cable, place grounding clip over both cables making sure clip comes into contact with cable screen portion with drain wire wrapped around it. Tighten clip screw firmly.

**5**



Using cable ties fix cables to panel's cable management bar. If required, connect grounding conductor to panel's grounding terminal post.

**Patch Panels** ▶ Blank Patch Panels

**Blank Keystone Patch Panels - High Density**



**1 RMU**

043-382/24/1 RMU



**2 RMU**

043-384/48/2 RMU



Hardware:  
4 x M6 screws

Item #	Description
043-382/24/1U	Blank Patch Panel, with Cable Manager, 1 RMU, 24 Port, Black
043-384/48/2U	Blank Patch Panel, with Cable Manager, 2 RMU, 48 Port, Black



**Features:**

- Constructed from heavy-duty 16-gauge steel and UL94-V-0 high-impact, fire-retardant material
- Sturdy Cable Manager attaches to Patch Panel
- Durable black powder coat finish

**Blank Patch Panels: V-Type with Cable Manager**

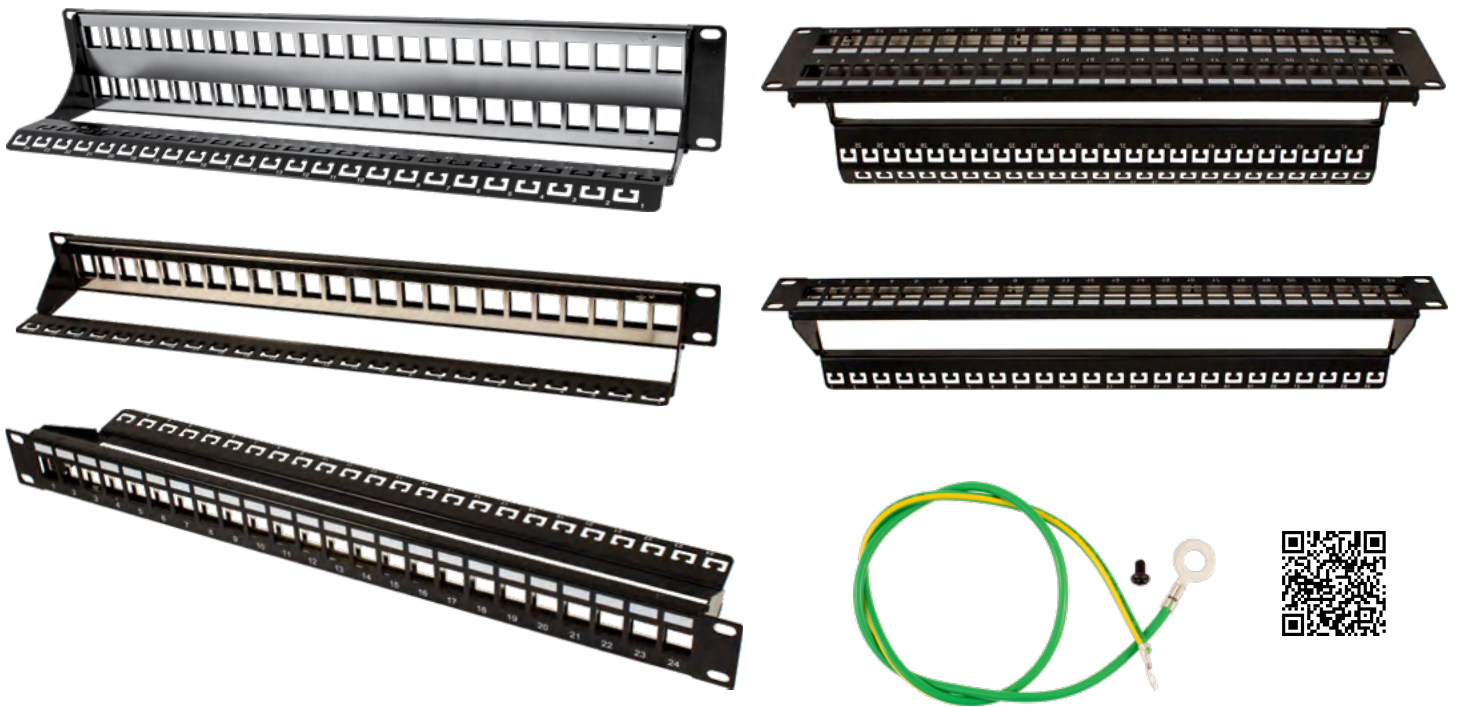


Item #	Description
043-383/A/24	Black Patch Panel, V-Type, 24 Port
043-384/A/48	Black Patch Panel, V-Type, 48 Port

**Features:**

- Constructed from heavy-duty 16-gauge steel and UL94-V-0 high-impact, fire-retardant material
- Durable black powder coat finish
- Universal 19 in mounting for either left or right hinging and easy panel access
- Allowing convenient Wall-Mounting of patch panels
- Mounting screws are not included

**Patch Panels** ▶ Blank Patch Panels - Shielded  
**Blank Shielded Keystone Patch Panels - High Density**



TWISTED-PAIR SYSTEMS

**Features:**

- Constructed from heavy-duty 16-gauge steel and UL94-V-0 high-impact, fire-retardant material.
- Supports cable, and prevents strain on the connection
- Works with 4 in, 6 in, 8 in Vertical Cable cable ties
- Sturdy Cable manager clips into the blank Patch Panel
- For Shielded Jacks, Ground Wire included
- Durable black powder coat finish
- Mounting screws are not included

Item #	Description
043-378/S/24/1U	Black Patch Panel, 24 Port, Shielded
043-379/S/48/2U	Black Patch Panel, 48 Port, Shielded



Photo by Pearce Smithwick, All Green Lights LLC

## Patch Panels ▶ Blank Patch Panels

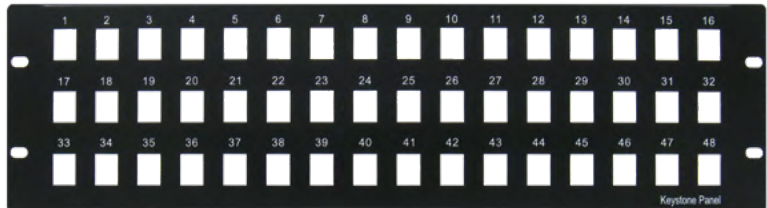
### Blank Keystone Patch Panels - Standard Density



1 RMU



2 RMU



3 RMU

Keystone Modules	P58
V-Max Keystone Jacks	P29
Patch Cords	P48
Racks	P146

Item #	Description
043-380/12	Blank Patch Panel, 12 Port, Black
043-382/24	Blank Patch Panel, 24 Port, Black
043-384/48	Blank Patch Panel, 48 Port, Black

#### Features:

- Constructed from heavy-duty 16-gauge steel and UL94-V-0 high-impact, fire-retardant material
- Durable black powder coat finish
- Universal 19 in mounting for either left or right hinging and easy panel access
- Allowing convenient Wall-Mounting of patch panels
- 4 x M6 screws

### Cable Management Brush Panels

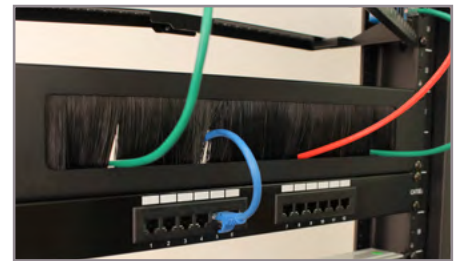


Front View

1 RMU



Back View



Front View

2 RMU



Back View

#### Similar Product:



307-520B/1G/WH

Item #	Description
047-WBP-1000	1 RMU Network Brush Panel, 19 in Rack Mount
047-WBP-2000	2 RMU Network Brush Panel, 19 in Rack Mount

#### Features:

- High density nylon brush
- Improves cooling efficiency by isolating air flows, provides installation with a clean, aesthetic appearance
- Reduces dust penetration into protected space
- Sturdy steel construction
- 1 RMU, 2 RMU – 19 in Rack Mount

## Racks & Accessories ▶ Panel Covers

### Blank Filler Panels - Vented



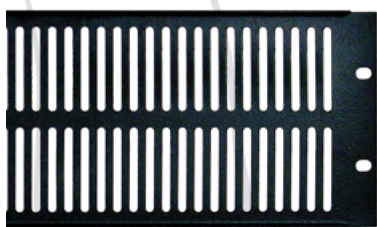
#### 1 RMU

Height	Width	Depth	Weight
1.3/4 in	19 in	0.5 in	1 lb



#### 2 RMU

Height	Width	Depth	Weight
3.5 in	19 in	0.5 in	2 lb



#### 3 RMU

Height	Width	Depth	Weight
5.1/4 in	19 in	0.5 in	2 lb

Item #	Description
043-385/VT/1U	1 RMU, Vented Panel Cover/ Filler 19 in Rack Mountable
043-386/VT/2U	2 RMU, Vented Panel Cover/ Filler 19 in Rack Mountable
043-387/VT/3U	3 RMU, Vented Panel Cover/ Filler 19 in Rack Mountable

#### Features:

- Mounts on any standard 19-in rack hardware
- Vented for allowing air circulation and improving lighting conditions
- Made of 1.5-mm steel
- Impact- and static-resistant black paint finish

### Blank Filler Panels - Solid



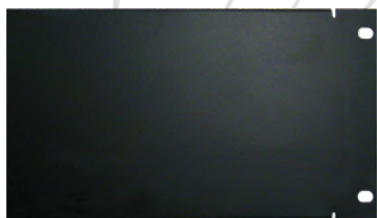
#### 1 RMU

Height	Width	Depth	Weight
1.3/4 in	19 in	0.5 in	1 lb



#### 2 RMU

Height	Width	Depth	Weight
3.5 in	19 in	0.5 in	2 lb



#### 3 RMU

Height	Width	Depth	Weight
5.1/4 in	19 in	0.5 in	2 lb

Hardware:  
M6.0 4pcs



#### 4 RMU

Height	Width	Depth	Weight
6.7/8 in	19 in	0.5 in	2.4 lb

Item #	Description
043-385/1U	1 RMU, Non-Vented Panel Cover/ Filler 19 in Rack Mountable
043-386/2U	2 RMU, Non-Vented Panel Cover/ Filler 19 in Rack Mountable
043-387/3U	3 RMU, Non-Vented Panel Cover/ Filler 19 in Rack Mountable
043-388/4U	4 RMU, Non-Vented Panel Cover/ Filler 19 in Rack Mountable

#### Features:

- Mounts on any standard 19-in rack hardware
- Made of 1.5-mm steel
- Impact- and static-resistant black paint finish
- Improves cooling efficiency by isolating air flows, provides installation with a clean, aesthetic appearance

# Patch Cords

TWISTED-PAIR SYSTEMS

Type / Category	CAT5E	CAT6	CAT6a
<b>Shielded</b>	<b>071 Series</b> 1, 3, 5, 7, 10, 14, 25 FT	-	<b>076 Series</b> 1, 3, 5, 7, 10, 14, 25 FT
<b>Unshielded with Protector</b>	<b>092 Series</b> 0.5, 1, 3, 4, 5, 6, 7, 10, 14, 20, 25, 35, 50, 100 FT	<b>094 Series</b> 0.5, 1, 3, 4, 5, 6, 7, 10, 14, 20, 25, 35, 50, 100 FT	<b>077 Series (Slim Type)</b> 0.5, 1, 2, 3, 5, 7, 10, 14, 25 FT
<b>Unshielded without Protector</b>	<b>093 Series</b> 1, 3, 5, 7, 10, 14, 25 FT	<b>095 Series</b> 0.5, 1, 3, 5, 6, 7, 10, 14, 20, 25, 50, 100 FT	-

## CAT5E Patch Cords - UTP Non-Booted



Size	Black	Blue	Green	Gray	Red	White	Yellow
1 FT	093-687/1BK	093-688/1BL	093-689/1GR	093-690/1GY	093-693/1RD	093-694/1WH	093-695/1YL
2 FT	093-696/2BK	093-697/2BL	093-698/2GR	093-699/2GY	093-702/2RD	093-703/2WH	093-704/2YL
3 FT	093-705/3BK	093-706/3BL	093-707/3GR	093-708/3GY	093-711/3RD	093-712/3WH	093-713/3YL
5 FT	093-714/5BK	093-715/5BL	093-716/5GR	093-717/5GY	093-720/5RD	093-721/5WH	093-722/5YL
7 FT	093-723/7BK	093-724/7BL	093-725/7GR	093-726/7GY	093-729/7RD	093-730/7WH	093-731/7YL
10 FT	093-732/10BK	093-733/10BL	093-734/10GR	093-735/10GY	093-738/10RD	093-739/10WH	093-740/10YL
14 FT	093-741/14BK	093-742/14BL	093-743/14GR	093-744/14GY	093-747/14RD	093-748/14WH	093-749/14YL
25 FT	093-759/25BK	093-760/25BL	093-761/25GR	093-762/25GY	093-765/25RD	093-766/25WH	093-767/25YL

### Features:

- CAT5E transmission performance
- Flame-retardant PVC jacket
- Gold-Plated Contacts
- UL-listed and RoHS Compliant
- 4 pairs of 24-AWG stranded insulated bare copper conductors
- Available in various colors and lengths

## CAT5E Patch Cords - F/UTP with Boot and Protector



Size	Blue	Gray	White
1 FT	071-481/1BL	071-483/1GY	071-487/1WH
3 FT	071-499/3BL	071-501/3GY	071-505/3WH
5 FT	071-508/5BL	071-510/5GY	071-514/5WH
7 FT	071-517/7BL	071-519/7GY	071-523/7WH
10 FT	071-526/10BL	071-528/10GY	071-532/10WH
14 FT	071-535/14BL	071-537/14GY	071-541/14WH
25 FT	071-544/25BL	071-546/25GY	Call

### Features:

- CAT5E transmission performance
- Flame-retardant PVC jacket
- Gold-Plated Contacts
- UL-listed and RoHS Compliant
- 4 pairs of 26-AWG stranded insulated bare copper conductors
- Available in various colors and lengths





# Patch Cords ▶ CAT5E

## CAT5E Patch Cords: UTP with Boot and Protector



Size	Black	Blue	Green	Gray	Orange	Purple	Red	White	Yellow
1/2 FT	092-570/05BK	092-571/05BL	092-572/05GR	092-573/05GY	Call	Call	Call	092-577/05WH	092-578/05YL
1 FT	092-579/1BK	092-580/1BL	092-581/1GR	092-582/1GY	092-583/1OR	092-584/1PR	092-585/1RD	092-586/1WH	092-587/1YL
2 FT	092-588/2BK	092-589/2BL	092-590/2GR	092-591/2GY	092-592/2OR	092-593/2PR	092-594/2RD	092-595/2WH	092-596/2YL
3 FT	092-597/3BK	092-598/3BL	092-599/3GR	092-600/3GY	092-601/3OR	092-602/3PR	092-603/3RD	092-604/3WH	092-605/3YL
4 FT	092-6051/4BK	092-6052/4BL	092-6053/4GR	092-6054/4GY	Call	092-6056/4PR	092-6057/4RD	092-6058/4WH	092-6059/4YL
5 FT	092-606/5BK	092-607/5BL	092-608/5GR	092-609/5GY	092-610/5OR	092-611/5PR	092-612/5RD	092-613/5WH	092-614/5YL
6 FT	092-6141/6BK	092-6142/6BL	092-6143/6GR	092-6144/6GY	092-6145/6OR	092-6146/6PR	092-6147/6RD	092-6148/6WH	092-6149/6YL
7 FT	092-615/7BK	092-616/7BL	092-617/7GR	092-618/7GY	092-619/7OR	092-620/7PR	092-621/7RD	092-622/7WH	092-623/7YL
10 FT	092-624/10BK	092-625/10BL	092-626/10GR	092-627/10GY	092-628/10OR	Call	092-630/10RD	092-631/10WH	092-632/10YL
14 FT	092-633/14BK	092-634/14BL	092-635/14GR	092-636/14GY	Call	Call	092-639/14RD	092-640/14WH	092-641/14YL
20 FT	092-642/20BK	092-643/20BL	092-644/20GR	Call	Call	Call	092-648/20RD	092-649/20WH	092-650/20YL
25 FT	092-651/25BK	092-652/25BL	092-653/25GR	092-654/25GY	Call	Call	092-657/25RD	092-658/25WH	092-659/25YL
35 FT	Call	092-6592/35BL	Call	092-6594/35GY	Call	Call	Call	092-6598/35WH	Call
50 FT	092-660/50BK	092-661/50BL	092-662/50GR	092-663/50GY	092-664/50OR	092-665/50PR	092-666/50RD	092-667/50WH	092-668/50YL
100 FT	092-678/100BK	092-679/100BL	092-680/100GR	092-681/100GY	092-682/100OR	092-683/100PR	092-684/100RD	092-685/100WH	092-686/100YL
150 FT	-	-	-	-	-	-	-	092-2398/150WH	-

TWISTED-PAIR SYSTEMS

## CAT6 Patch Cords: UTP Non-Booted



Size	Black	Blue	Green	Gray	Red	White	Yellow
1 FT	095-903/1BK	095-904/1BL	095-905/1GR	095-906/1GY	095-909/1RD	095-910/1WH	095-911/1YL
2 FT	095-912/2BK	095-913/2BL	095-914/2GR	095-915/2GY	095-918/2RD	095-919/2WH	095-920/2YL
3 FT	095-921/3BK	095-922/3BL	095-923/3GR	095-924/3GY	095-927/3RD	095-928/3WH	095-929/3YL
5 FT	095-930/5BK	095-931/5BL	095-932/5GR	095-933/5GY	095-936/5RD	095-937/5WH	095-938/5YL
7 FT	095-939/7BK	095-940/7BL	095-941/7GR	095-942/7GY	095-945/7RD	095-946/7WH	095-947/7YL
10 FT	095-948/10BK	095-949/10BL	095-950/10GR	095-951/10GY	095-954/10RD	095-955/10WH	095-956/10YL
14 FT	095-957/14BK	095-958/14BL	095-959/14GR	095-960/14GY	095-963/14RD	095-964/14WH	095-965/14YL
25 FT	095-975/25BK	095-976/25BL	095-977/25GR	095-978/25GY	095-981/25RD	095-982/25WH	095-983/25YL

### Features:

- CAT6 transmission performance
- Flame-retardant PVC jacket
- Gold plating contacts
- UL-listed and RoHS Compliant
- 4 pairs of 24-AWG stranded insulated bare copper conductors
- Available in various colors and lengths



# CAT6 Patch Cords: UTP with Boot and Protector



TWISTED-PAIR SYSTEMS

Size	Black	Blue	Green	Gray	Orange	Purple	Red	White	Yellow
1/2 FT	094-786/05BK	094-787/05BL	094-788/05GR	094-789/05GY	Call	Call	Call	094-793/05WH	094-794/05YL
1 FT	094-795/1BK	094-796/1BL	094-797/1GR	094-798/1GY	094-799/1OR	094-800/1PR	094-801/1RD	094-802/1WH	094-803/1YL
2 FT	094-804/2BK	094-805/2BL	094-806/2GR	094-807/2GY	094-808/2OR	094-809/2PR	094-810/2RD	094-811/2WH	094-812/2YL
3 FT	094-813/3BK	094-814/3BL	094-815/3GR	094-816/3GY	094-817/3OR	094-818/3PR	094-819/3RD	094-820/3WH	094-821/3YL
4 FT	094-821/4BK	094-8212/4BL	094-8213/4GR	094-8214/4GY	Call	Call	094-8217/4RD	094-8218/4WH	094-8219/4YL
5 FT	094-822/5BK	094-823/5BL	094-824/5GR	094-825/5GY	094-826/5OR	094-827/5PR	094-828/5RD	094-829/5WH	094-830/5YL
6 FT	094-8301/6BK	094-8302/6BL	094-8303/6GR	094-8304/6GY	094-8305/6OR	094-8306/6PR	094-8307/6RD	094-8308/6WH	094-8309/6YL
7 FT	094-831/7BK	094-832/7BL	094-833/7GR	094-834/7GY	094-835/7OR	094-836/7PR	094-837/7RD	094-838/7WH	094-839/7YL
10 FT	094-840/10BK	094-841/10BL	094-842/10GR	094-843/10GY	094-844/10OR	094-845/10PR	094-846/10RD	094-847/10WH	094-848/10YL
14 FT	094-849/14BK	094-850/14BL	094-851/14GR	094-852/14GY	094-853/14OR	094-854/14PR	094-855/14RD	094-856/14WH	094-857/14YL
20 FT	094-858/20BK	094-859/20BL	094-860/20GR	Call	Call	Call	Call	094-865/20WH	094-866/20YL
25 FT	094-867/25BK	094-868/25BL	094-869/25GR	094-870/25GY	Call	094-872/25PR	094-873/25RD	094-874/25WH	094-875/25YL
35 FT	Call	094-8752/35BL	Call	094-8754/35GY	Call	Call	Call	094-8758/35WH	Call
50 FT	094-876/50BK	094-877/50BL	094-878/50GR	094-879/50GY	Call	Call	094-882/50RD	094-883/50WH	Call
75 FT	094-885/75BK	094-886/75BL	Call	094-888/75GY	Call	Call	Call	094-892/75WH	Call
100 FT	094-894/100BK	094-895/100BL	Call	094-897/100GY	Call	Call	094-900/100RD	094-901/100WH	094-902/100YL
150 FT	Call	094-2399/150BL	Call	094-2400/150GY	Call	Call	Call	094-2401/150WH	Call

Patch Panels P40

Wall Plates P36

Keystone Jacks P29

# CAT6a Patch Cords: S/STP with Boot and Protector



Size	Black	Blue	Green	Gray	Red	White	Yellow
1/2 FT	076-1002/05BK	076-1001/05BL	076-1003/05GR	076-1004/05GY	Call	076-1008/05WH	Call
1 FT	076-1010/1BK	076-1011/1BL	076-1012/1GR	076-1013/1GY	076-1016/1RD	076-1017/1WH	076-1018/1YL
3 FT	076-1028/3BK	076-1029/3BL	076-1030/3GR	076-1031/3GY	076-1034/3RD	076-1035/3WH	076-1036/3YL
5 FT	076-1037/5BK	076-1038/5BL	076-1039/5GR	076-1040/5GY	076-1043/5RD	076-1044/5WH	076-1045/5YL
7 FT	076-1046/7BK	076-1047/7BL	076-1048/7GR	076-1049/7GY	076-1052/7RD	076-1053/7WH	076-1054/7YL
10 FT	076-1055/10BK	076-1056/10BL	076-1057/10GR	076-1058/10GY	076-1061/10RD	076-1062/10WH	076-1063/10YL
14 FT	076-1064/14BK	076-1065/14BL	076-1066/14GR	076-1067/14GY	076-1070/14RD	076-1071/14WH	076-1072/14YL
25 FT	076-1073/25BK	076-1074/25BL	076-1075/25GR	076-1076/25GY	076-1079/25RD	076-1080/25WH	076-1081/25YL



- Features:**
- CAT6a transmission performance
  - Flame-retardant PVC jacket
  - Gold-plated contacts
  - UL-listed and RoHS Compliant
  - 4 pairs of 24-AWG stranded insulated bare copper conductors
  - Available in various colors and lengths

# Patch Cords ▶ CAT6a Patch Cords

## CAT6a Patch Cords: UTP with Protector (Slim Type)



Size	Black	Blue	Green	Gray	Orange	Purple	Red	White	Yellow
1/2 FT	077-2010/05BK	077-2011/05BL	077-2012/05GR	077-2013/05GY	077-2014/05OR	077-2015/05PR	077-2016/05RD	077-2017/05WH	077-2018/05YL
1 FT	077-2019/1BK	077-2020/1BL	077-2021/1GR	077-2022/1GY	077-2023/1OR	077-2024/1PR	077-2025/1RD	077-2026/1WH	077-2027/1YL
2 FT	077-2028/2BK	077-2029/2BL	077-2030/2GR	077-2031/2GY	077-2032/2OR	077-2033/2PR	077-2034/2RD	077-2035/2WH	077-2036/2YL
3 FT	077-2037/3BK	077-2038/3BL	077-2039/3GR	077-2040/3GY	077-2041/3OR	077-2042/3PR	077-2043/3RD	077-2044/3WH	077-2045/3YL
5 FT	077-2046/5BK	077-2047/5BL	077-2048/5GR	077-2049/5GY	077-2050/5OR	077-2051/5PR	077-2052/5RD	077-2053/5WH	077-2054/5YL
7 FT	077-2064/7BK	077-2065/7BL	077-2066/7GR	077-2067/7GY	077-2068/7OR	077-2069/7PR	077-2070/7RD	077-2071/7WH	077-2072/7YL
10 FT	077-2073/10BK	077-2074/10BL	077-2075/10GR	077-2076/10GY	077-2077/10OR	077-2078/10PR	077-2079/10RD	077-2080/10WH	077-2081/10YL
14 FT	077-2082/14BK	077-2083/14BL	077-2084/14GR	077-2085/14GY	077-2086/14OR	077-2087/14PR	077-2088/14RD	077-2089/14WH	077-2090/14YL
25 FT	094-867/25BK	094-868/25BL	077-2102/25GR	077-2103/25GY	077-2104/25OR	077-2105/25PR	077-2106/25RD	094-874/25WH	077-2108/25YL

### Features:

- CAT6a transmission performance
- Flame-retardant PVC jacket
- Gold-plated contacts
- UL-listed and RoHS Compliant
- 4 pairs of 28-AWG stranded insulated bare copper conductors
- Available in various colors and lengths

- Reduced cable diameter increases flexibility, reduces required bend radius and cable bundle dimensions.
- Better airflow helps to cool down active equipment more efficiently.



TWISTED-PAIR SYSTEMS



**MATCHING COLORS OF KEYSTONE JACKS & PATCH CORDS**

# Modular Plugs: CAT3, CAT5E, CAT6, CAT6a

50 Micro-Inch Gold-Plated Contacts

TWISTED-PAIR SYSTEMS

## CAT6a



012-021-100  
Shielded



012-025/EZF-100  
Feed-through



012-026/EZF-100  
Shielded Feed-through



012-024/10G  
Shielded

## CAT6



012-022-100



012-023/EZF-100  
Feed-through



012-019  
Shielded

### Features:

- Suitable for PoE + IEEE 802.3 af/at
- Copper Tape & Strain Boot Included

Tools Compatibility Chart

P178

## CAT5E



011-016-100



011-018EZF-100  
Feed-through



011-019EZF-100  
Feed-through  
Shielded



011-020-G-100  
With ground wire hook  
Shielded



011-017-100  
For Solid / Stranded Cable  
Shielded

## CAT3



009-007/64R-100  
RJ11 Modular Plug



009-008/66R-100  
RJ12 Modular Plug



009-1024/44R  
RJ22 Modular Plug

Item #	Description
009-007/64R-100	CAT3 Plug, RJ11 Modular Plug   For Round Solid/Stranded CAT3 Telephone Cable (4C), 100 per bag
009-008/66R-100	CAT3 Plug, RJ12 Modular Plug   For Round Solid/Stranded CAT3 Telephone Cable (6C), 100 per bag
009-102444R-100	CAT3 Plug, RJ22 Modular Plug   For telephone handset cord, 100 per bag
011-016-100	CAT5E Plug, RJ45, 8P/8C, 3 Prong, for Round Solid/Stranded Cable, 100 per bag
011-017-100	CAT5E Shielded Plug, RJ45, 8P/8C, 3 Prong, for Round Solid/Stranded Cable, 100 per bag
011-018/EZF-100	CAT5E Easy Feed RJ45 Plug, 8P/8C, 3 prong, for Solid/Stranded Cable, 100 per bag
011-019/EZF-100	CAT5E Easy Feed RJ45 Shielded Plug, 8P/8C, 3 prong, for Solid/Stranded Cable, 100 per bag
011-020G-100	CAT5E Shielded Plug W/Holder / Hook For Drain / Ground Wire, 100 per bag
012-021-100	CAT6 & CAT6a Shielded Plug, RJ45, 8P/8C, 3 Prong, for Solid Cable, With Load Bar, 100 per bag
012-022-100	CAT6 RJ45 Modular Plug without load bar, 100 per bag
012-023/EZF-100	CAT6 Easy Feed RJ45 Plug, 8P/8C, 3 prong, for Solid/Stranded Cable, 100 per bag
012-024/10G	CAT6a RJ45, Shielded, 10G Rated, Snap in Boot Type, Individually packed
012-025/EZF-100	CAT6a Easy Feed RJ45 Modular Plug for Unshielded Cable, 100 per bag
012-026/EZF-100	CAT6a Easy Feed RJ45 Modular Plug for Shielded Cable, 100 per bag

# Slip-On Boots

## RJ45 Slip on Boots CAT5E/CAT6



10Pack

### Features:

- 6.5 mm PVC slip-on-boot
- Fits CAT3 UTP, CAT5E UTP, CAT5E F/UTP, CAT6 UTP cable
- Fits all vertical cable RJ45 plugs except the 012-021-100 and 012-026-100 (CAT6a Shielded Plugs with the wing)
- Provides strain relief and prevents plugs from snagging

Item #	Description
015-027BK-10	Slip-On Boot, for CAT5E/CAT6, Black
015-029BL-10	Slip-On Boot, for CAT5E/CAT6, Blue
015-033GY-10	Slip-On Boot, for CAT5E/CAT6, Gray
015-031GR-10	Slip-On Boot, for CAT5E/CAT6, Green
015-035OR-10	Slip-On Boot, for CAT5E/CAT6, Orange
015-037RD-10	Slip-On Boot, for CAT5E/CAT6, Red
015-039WH-10	Slip-On Boot, for CAT5E/CAT6, White
015-041YL-10	Slip-On Boot, for CAT5E/CAT6, Yellow
015-045VT-10	Slip-On Boot, for CAT5E/CAT6, Violet

## RJ45 Slip on Boots CAT6/CAT6a

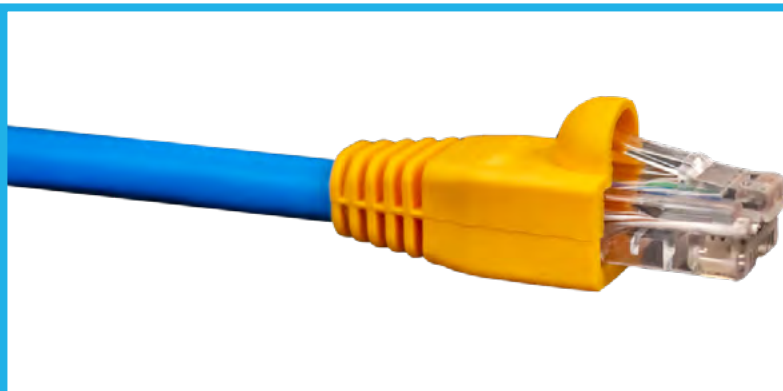


50-Pack

### Features:

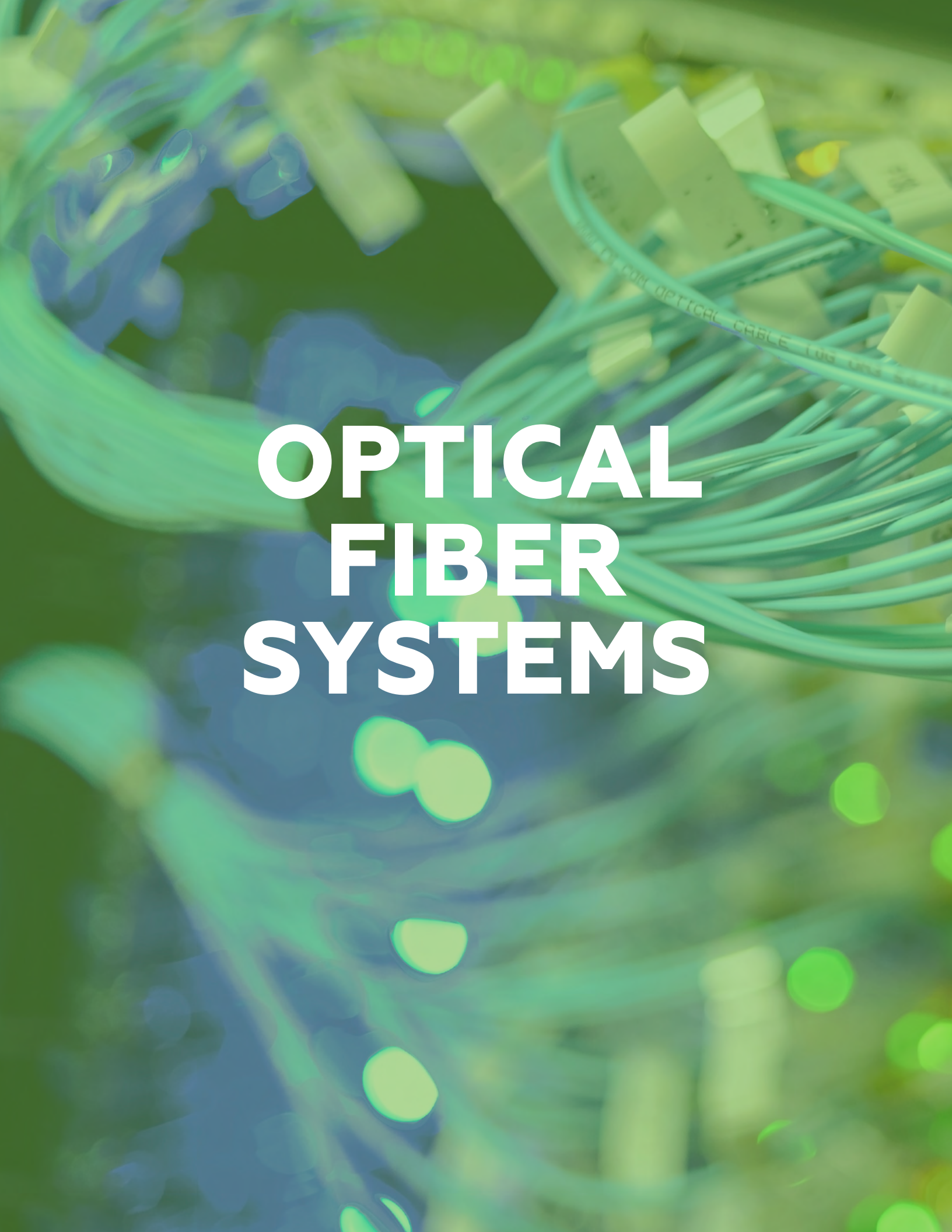
- 8.5 mm PVC slip-on-boot
- Fits CAT6 F/UTP, CAT6a UTP, CAT6a F/UTP cable
- Fits all vertical cable RJ45 plugs
- Provides strain relief and protects RJ45 plugs from and snags

Item #	Description
016-045BK-50	Slip-On Boot, for CAT6/CAT6a, Black
016-046BL-50	Slip-On Boot, for CAT6/CAT6a, Blue
016-048GY-50	Slip-On Boot, for CAT6/CAT6a, Gray
016-047GR-50	Slip-On Boot, for CAT6/CAT6a, Green
016-051RD-50	Slip-On Boot, for CAT6/CAT6a, Red
016-052WH-50	Slip-On Boot, for CAT6/CAT6a, White
016-053YL-50	Slip-On Boot, for CAT6/CAT6a, Yellow



### Slip-on Boots are needed for:

- Protecting plugs from damage
- Relieving stress at cable entry point
- Maintaining safe cable bend radii
- Covering external metal elements in shielded plugs
- Preventing plugs from snagging

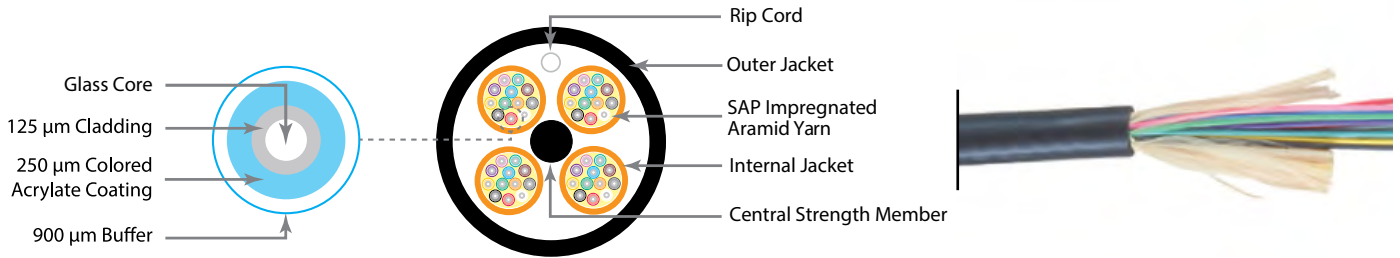


# **OPTICAL FIBER SYSTEMS**

# OPTICAL FIBER CABLE ▶ ISP Cables

Indoor/Outdoor Tight Buffered (Plenum)  
(UL) OFNP c(UL) OFNP FT6

**MADE IN USA**



Item #	Description
261-13104P	Indoor/Outdoor Tight-Buffer Plenum Cable, UV-resistant Jacket, 6 Fibers, 62.5 UM OM1, Multimode
261-13110P	Indoor/Outdoor Tight-Buffer Plenum Cable, UV-resistant Jacket, 12 Fibers, 62.5 UM OM1, Multimode
261-13328P	Indoor/Outdoor Tight-Buffer Plenum Cable, UV-resistant Jacket, 6 Fibers, 50 UM OM3, Multimode
261-13334P	Indoor/Outdoor Tight-Buffer Plenum Cable, UV-resistant Jacket, 12 Fibers, 50 UM OM3, Multimode
261-13336P	Indoor/Outdoor Tight-Buffer Plenum Cable, UV-resistant Jacket, 24 Fibers, 50 UM OM3, Multimode
261-13956P	Indoor/Outdoor Tight-Buffer Plenum Cable, UV-resistant Jacket, 6 Fibers, 8.3 UM OS2, Singlemode
261-13962P	Indoor/Outdoor Tight-Buffer Plenum Cable, UV-resistant Jacket, 12 Fibers, 8.3 UM OS2, Singlemode
261-13964P	Indoor/Outdoor Tight-Buffer Plenum Cable, UV-resistant Jacket, 24 Fibers, 8.3 UM OS2, Singlemode

Fiber Count	Cable O.D.		Recommended Maximum Loads				Cable Weight	
	in	mm	Install		Operation		lb/1000 ft	kg/1000 m
			lb-f	N	lb-f	N		
6	0.19	4.83	128	570	38	171	15.1	22.5
12	0.23	5.84	160	712	48	214	22.5	33.5
24	0.33	8.38	288	1282	86	385	50.2	74.8

Standard
ANSI/TIA-568.3-D
ISO/IEC 11801
Telcordia GR-409-CORE

Fiber Class	Max. Attenuation		Min OFL Bandwidth		Min, EMBc Bandwidth		Max. Gigabit Ethernet Distance		Max. 10 Gigabit Ethernet Distance	
	(db/km)		(MHz-km)		(MHz-km)		m		m	
	850nm (MM)	1300nm (MM)	850nm (MM)	1300nm (MM)	850nm (MM)	1300nm (MM)	850nm (MM)	1300nm (MM)	850nm (MM)	1300nm (MM)
OM1	3.5	1.0	200	500	220	N/A	300	550	33	N/A
OM3	3.0	1.0	1500	500	2000	N/A	1000	550	300	N/A
OS2	0.5	0.5	N/A	N/A	N/A	N/A	> 25,000	> 40,000	10,000 - 25,000	40,000



Installation Requirements – Mechanical & Environmental	
Temperature	Storage: -40° to 70°C (-40° to 158°F) Installation: 0°C to 60°C (32° to 140°F) Operation: -40° to 70°C (-40° to 158°F)

OPTICAL FIBER SYSTEMS

# OPTICAL FIBER CABLE ▶ OSP Loose-Tube Cables, Non-Armored

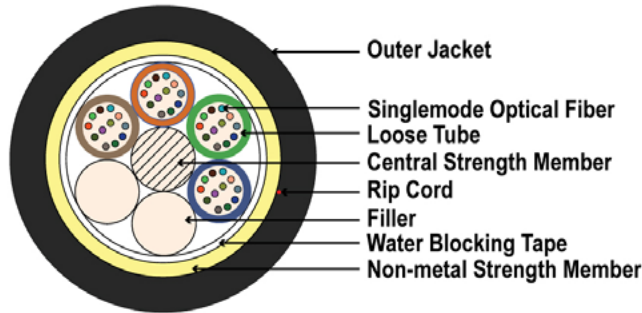
Item #	Description
261-11900A	All-Dielectric Outside Plant Loose Tube Optical Fiber Cable 12 Fibers Non-Armored, Singlemode
261-11902A	All-Dielectric Outside Plant Loose Tube Optical Fiber Cable 24 Fibers Non-Armored, Singlemode
261-11904A	All-Dielectric Outside Plant Loose Tube Optical Fiber Cable 36 Fibers Non-Armored, Singlemode
261-11906A	All-Dielectric Outside Plant Loose Tube Optical Fiber Cable 48 Fibers Non-Armored, Singlemode
261-11908A	All-Dielectric Outside Plant Loose Tube Optical Fiber Cable 72 Fibers Non-Armored, Singlemode
261-11910A	All-Dielectric Outside Plant Loose-Tube Optical Fiber Cable 96 Fibers Non-Armored, Singlemode
261-11912A	All-Dielectric Outside Plant Loose Tube Optical Fiber Cable 144 Fibers Non-Armored, Singlemode

## Construction

Fiber Count	12-72	84-96	108-144	192-216	240-288
Cable O.D. Nom.	0.41 in (10.5 mm)	0.48 in (12.2 mm)	0.59 in (15.1 mm)	0.61 in (15.6 mm)	0.71 in (18.1 mm)
Cable Weight Nom.	50 lb/kft (75 kg/km)	70 lb/kft (105 kg/km)	107 lb/kft (160 kg/km)	107 lb/kft (160 kg/km)	145 lb/kft (215 kg/km)
Fiber Color Coding per TIA-598-D	Blue, Orange, Green, Brown, Slate, White, Red, Black, Yellow, Violet, Rose, Aqua				
Fiber Count per Tube	12				
Tube Count per Cable	6	8	12	18	24
Tube Color Coding per TIA-598-D	Blue, Orange, Green, Brown, Slate, White, Red, Black, Yellow, Violet, Rose, Aqua Blue*, Orange*, Green*, Brown*, Slate*, White*, Red*, Black**, Yellow*, Violet*, Rose*, Aqua*				
Tube Material	PBT(Polybutylene Terephthalate) or TPE(Thermal Poly Elastomer)				
Water Blocking Material	Water Swellable Yarn and Tape				
Central Strength Member	FRP (Fiber Reinforced Plastic)				
Stripping material	Ripcord				
Jacket Material	Medium Density Polyethylene				

<sup>1</sup>Tracer Color Coding:  
\*: Tube with black tracer | \*\*: Tube with white tracer

OPTICAL FIBER SYSTEMS



(Representation of a standard 48 fiber construction)

### Features:

- All-dry (Gel-free)
- Loose Tube
- All-Dielectric
- Non-Armored
- Color-Coded Fibers

### Applications:

- Outside Plant Installations
- Duct
- Aerial Lashed



### Characteristics

Type of Fiber	ITU-T G.652.D
Mode Field Diameter	9.2±0.4 μm at 1310 nm
Maximum Attenuation	0.35 dB/km at 1310 nm 0.35 dB/km at 1383 nm 0.25 dB/km at 1550 nm

### Standards and Certifications

ITU-T G.650, IEC 60793, IEC 60794, RUS 7 CFR 1755, TELCORDIA GR-20, ISO 9001, ISO 14001, ANSI/TIA-568.3-D, TIA-598-D, OHSAS 18001



Item #	Description
261-11916B	Outside Plant Loose Tube Optical Fiber Cable 12 Fibers Single-Armored, Singlemode
261-11918B	Outside Plant Loose Tube Optical Fiber Cable 24 Fibers Single-Armored, Singlemode
261-11920B	Outside Plant Loose Tube Optical Fiber Cable 36 Fibers Single-Armored, Singlemode
261-11922B	Outside Plant Loose Tube Optical Fiber Cable 48 Fibers Single-Armored, Singlemode
261-11924B	Outside Plant Loose Tube Optical Fiber Cable 72 Fibers Single-Armored, Singlemode
261-11926B	Outside Plant Loose-Tube Optical Fiber Cable 96 Fibers Single-Armored, Singlemode
261-11928B	Outside Plant Loose Tube Optical Fiber Cable 144 Fibers Single-Armored, Singlemode

Construction					
Fiber Count	12-72	84-96	108-144	192-216	240-288
Cable O.D. Nom.	0.46 in (11.7 mm)	0.52 in (13.4 mm)	0.64 in (16.3 mm)	0.66 in (16.8 mm)	0.76 in (19.3 mm)
Cable Weight Nom.	80 lb/kft (120 kg/km)	104 lb/kft (155 kg/km)	147 lb/kft (220 kg/km)	158 lb/kft (235 kg/km)	205 lb/kft (305 kg/km)
Fiber Color Coding per TIA-598-D	Blue, Orange, Green, Brown, Slate, White, Red, Black, Yellow, Violet, Rose, Aqua				
Fiber Count per Tube	12				
Tube Count per Cable	6	8	12	18	24
Tube Color Coding <sup>1</sup> per TIA-598-D	Blue, Orange, Green, Brown, Slate, White, Red, Black, Yellow, Violet, Rose, Aqua Blue*, Orange*, Green*, Brown*, Slate*, White*, Red*, Black**, Yellow*, Violet*, Rose*, Aqua*				
Tube Material	PBT(Polybutylene Terephthalate) or TPE(Thermal Poly Elastomer)				
Water Blocking Material	Water Swellable Yarn and Tape				
Central Strength Member	FRP (Fiber Reinforced Plastic)				
Stripping material	Ripcord				
Armoring material	Corrugated steel tape				
Jacket Material	Medium Density Polyethylene				

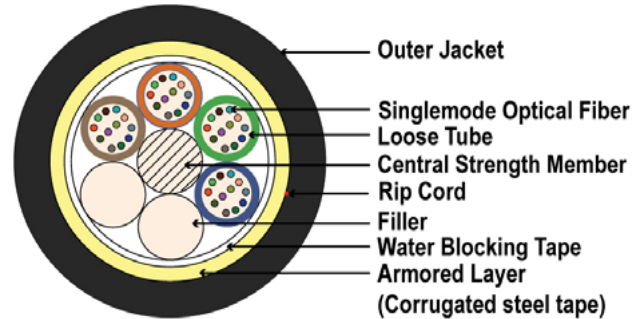
<sup>1</sup>Tracer Color Coding:  
\*: Tube with black tracer | \*\*: Tube with white tracer

**Features:**

- All-dry (Gel-free)
- Loose Tube
- Armored
- Direct Burial
- Color-Coded Fibers

**Applications:**

- Outside Plant Installations
- Direct Burial
- Duct



(Representation of a standard 48 fiber construction)

Installation Requirements – Mechanical & Environmental	
Temperature	Storage: -40 °F to +167 °F (-40 °C to +75 °C) Installation: -22 °F to +140 °F (-30 °C to +60 °C) Operation: -40 °F to +158 °F (-40 °C to +70 °C)
Min Bend Radius	Loaded: 20 X Cable O.D. Unloaded: 10 X Cable O.D.
Tensile Strength	Installation: 2700 N (600 lbf) Long Term: 800 N (180 lbf)



# WORK AREA


Wall Outlets and Surface-Mount Boxes ▶ Keystone Modules

OPTICAL FIBER SYSTEMS

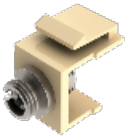
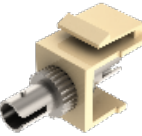
## Black Bezels

		BLUE	GREEN	AQUA	HEATHER VIOLET
FC	 264-KMB02-01-BK	SC SX  264-KMB01-3Z-BK	 264-KMB01-3Y-BK	 264-KMB01-3C-BK	—
ST	 264-KMB02-02-BK	LC DX  264-KMB01-4Z-BK	 264-KMB01-4Y-BK	 264-KMB01-4C-BK	 264-KMB01-4D-BK


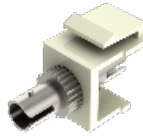
## White Bezels

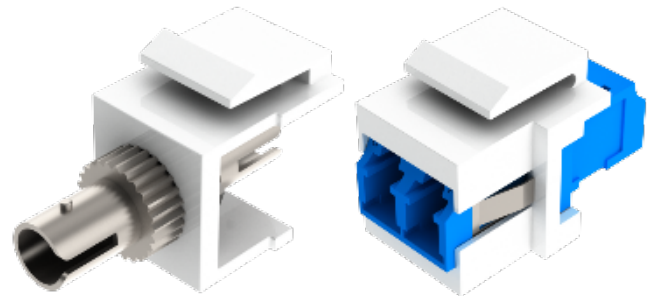
		BLUE	GREEN	AQUA	HEATHER VIOLET
FC	 264-KMB02-01-WH	SC SX  264-KMB01-3Z-WH	 264-KMB01-3Y-WH	 264-KMB01-3C-WH	—
ST	 264-KMB02-02-WH	LC DX  264-KMB01-4Z-WH	 264-KMB01-4Y-WH	 264-KMB01-4C-WH	 264-KMB01-4D-WH

## Ivory Bezels

FC	 264-KMB02-01-IV
ST	 264-KMB02-02-IV

## Almond Bezels

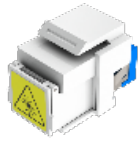
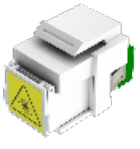
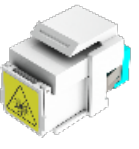



FC	 264-KMB02-01-AL
ST	 264-KMB02-02-AL



Keystone modules with adapters of other colors are available as special orders, minimum order quantity – 100 units of each color.

**White Bezels**



	BLUE	GREEN	AQUA
SC SX	 264-KMB03-3Z-WH	 264-KMB03-3Y-WH	 264-KMB03-3C-WH
LC DX	 264-KMB03-4Z-WH	 264-KMB03-4Y-WH	 264-KMB03-4C-WH



**CHARACTERISTICS**

**Compatibility:** all Vertical Cable faceplates and surface-mount boxes designed to mount keystone modules.

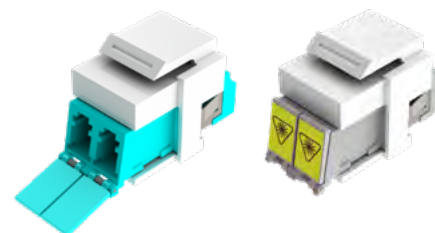
**Fiber types:** SM 9/125;  
MM 50/125;  
MM 62.5/125.

**Plug types:** **UPC;**  
**APC.**

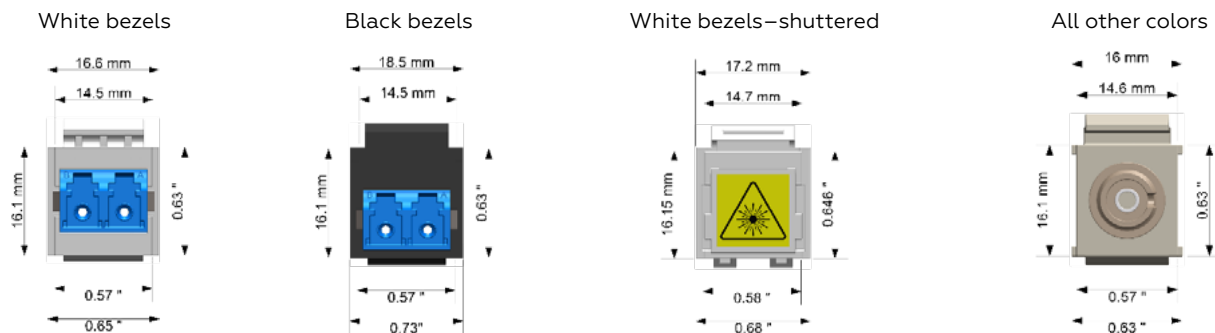
**Adapter sleeves:** Zirconia ceramic split sleeves.

**Insertion loss (IL):** 0.3 dB or lower (when used with standard-compliant plugs).

**Return loss (RL):** UPC: ≥55 dB (when used with standard-compliant plugs);  
APC: ≥65 dB (when used with standard-compliant plugs).



**Mounting dimensions:**

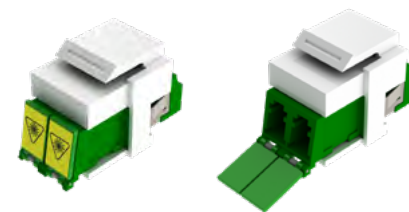


**Environmental:** operating temperature: -20 °C–+70 °C (-4 °F–+158 °F);  
operating humidity: ≤95 % RH non-condensing.

**Bezel material:** ABS (acrylonitrile butadiene styrene).

**Bezel compliance:** Regulation (EC) No 1907/2006 (REACH);  
Directive 2011/65/EU Am. 2015/863/EU (RoHS2).

**Adapter compliance:** IEC 61754-2 (type BFOC/2.5 connector family (ST));  
IEC 61754-4 (type SC connector family);  
IEC 61754-13 (type FC-PC connector family);  
IEC 61754-20 (type LC connector family);  
Regulation (EC) No 1907/2006 (REACH);  
Directive 2011/65/EU Am. 2015/863/EU (RoHS2);  
ANSI/UL 94 V-0.



# CROSS-CONNECT ▶ Rack-Mount Panels

## Adapter Plate Panels

- 266-PMD01-2A3A Optical Fiber Rack-Mount Panel, LGX, Three-Position, Front and Rear CMB, 1 RMU
- 266-PMD01-1A3A Optical Fiber Rack-Mount Panel, LGX, Three-Position, 1 RMU

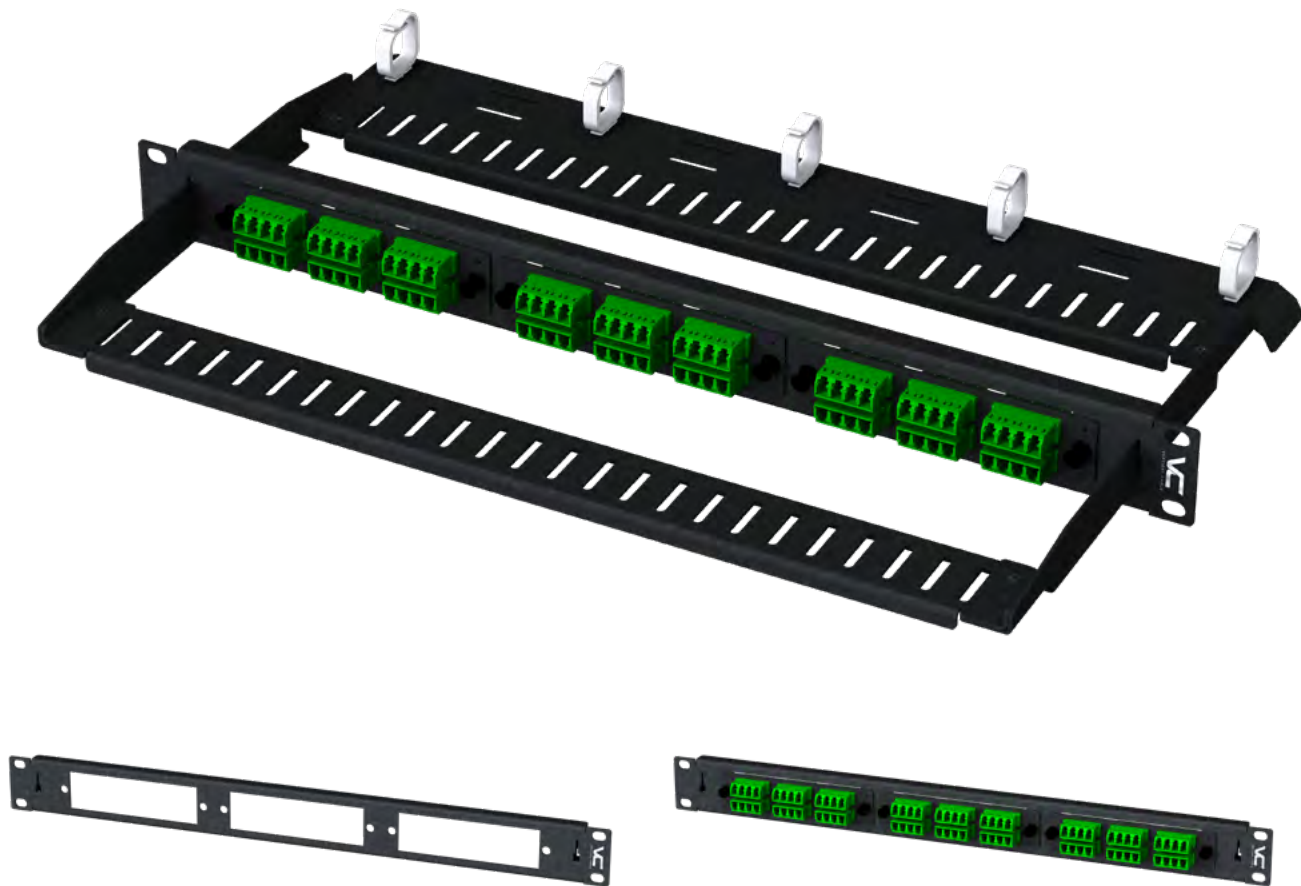
AVAILABLE Q4 2021

### CHARACTERISTICS

- Form-factor:** 19-in rack/cabinet mounting standard (EIA-ECA-310-E).
- Capacity:** three LGX adapter plates; up to 72 optical fibers.
- Materials:** 1.5-mm (16-GA) CRS; black powder coating.
- Cable management:** 266-PMD01-1A3A: integral, rear; 266-PMD01-2A3A: mountable (snap-in), interchangeable, front and/or rear.
- Environmental:** operating temperature: -20 °C–+70 °C (-4 °F–+158 °F); operating humidity: ≤95 % RH non-condensing.
- Dimensions:** W: 485 mm (19 in); H: 44.5 mm (1.75 in) [1 RMU]; D: 15 mm (0.6 in) panel frame; D: 125 mm (5 in) with CMB.
- Weight:** 0.25 kg (0.6 lb) without cable management.

Adapter Plates	P74
Cable Management Bars	P64

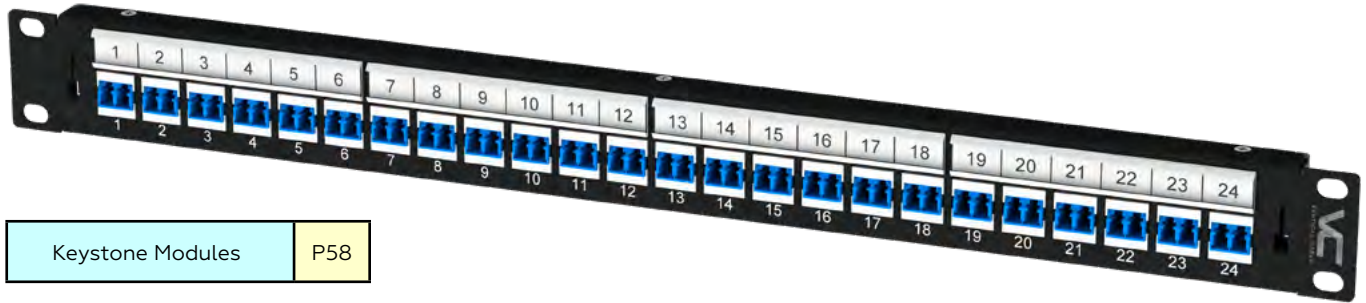
OPTICAL FIBER SYSTEMS




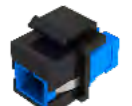
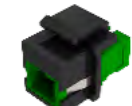















# CROSS-CONNECT ▶ Rack-Mount Panels

## Keystone Module Panels

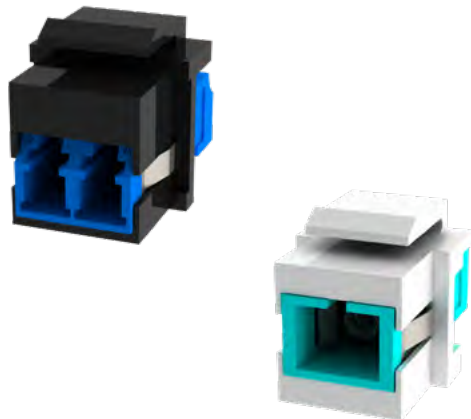
- 266-PKM01-24Axx Optical Fiber Rack-Mount Panel, Keystone Module, 1-RMU, White Bezels, 24-Position
- 266-PKM01-24Bxx Optical Fiber Rack-Mount Panel, Keystone Module, 1-RMU, Black Bezels, 24-Position



Keystone Modules P58

Panels with Black Bezels			BLUE	GREEN	AQUA	HEATHER VIOLET		
FC	24 modules 24 fibers	 266-PKM01-24B10	SC SX	24 modules 24 fibers	 266-PKM01-24B3Z	 266-PKM01-24B3Y	 266-PKM01-24B3C	-
ST	24 modules 24 fibers	 266-PKM01-24B20	LC DX	24 modules 48 fibers	 266-PKM01-24B4Z	 266-PKM01-24B4Y	 266-PKM01-24B4C	 266-PKM01-24B4D
Panels with White Bezels			BLUE	GREEN	AQUA	HEATHER VIOLET		
FC	24 modules 24 fibers	 266-PKM01-24A10	SC SX	24 modules 24 fibers	 266-PKM01-24A3Z	 266-PKM01-24A3Y	 266-PKM01-24A3C	-
ST	24 modules 24 fibers	 266-PKM01-24A20	LC DX	24 modules 48 fibers	 266-PKM01-24A4Z	 266-PKM01-24A4Y	 266-PKM01-24A4C	 266-PKM01-24A4D

All adapters are equipped with zirconia-ceramic split sleeves compatible with MM and SM fibers.  
Keystone modules with adapters of other colors are available as special orders, minimum order quantity – equivalent of 96 keystone modules of each color.



### CHARACTERISTICS

- Form-factor:** 19-in rack/cabinet mounting standard (EIA-ECA-310-E).
- Capacity:** twenty-four keystone modules; up to 24 optical fibers (FC, ST, SC SX adapters); up to 48 optical fibers (LC DX adapters).
- Materials:** 1.5-mm (16-GA) CRS; black powder coating.
- Cable management:** rear, integral.
- Environmental:** operating temperature: -20 °C–+70 °C (-4 °F–+158 °F); operating humidity: ≤95 % RH non-condensing.
- Dimensions:** W: 485 mm (19 in); H: 44.5 mm (1.75 in) [1 RMU]; D: 15 mm (0.6 in).
- Weight:** 0.6 kg (1.32 lb)


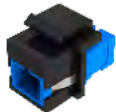
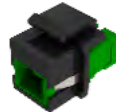
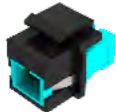


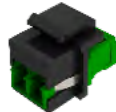
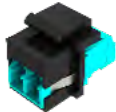










OPTICAL FIBER SYSTEMS

# CROSS-CONNECT ▶ Keystone Module Panels

- 266-PKM02-24000 Optical Fiber Rack-Mount Panel, Keystone Module, 1-RMU, Unloaded, Front & Rear CMB, 24-Position
- 266-PKM02-24Axx Optical Fiber Rack-Mount Panel, Keystone Module, 1-RMU, White Bezels, Front & Rear CMB, 24-Position
- 266-PKM02-24Bxx Optical Fiber Rack-Mount Panel, Keystone Module, 1-RMU, Black Bezels, Front & Rear CMB, 24-Position



OPTICAL FIBER SYSTEMS

Panels with Black Bezels			BLUE	GREEN	AQUA	HEATHER VIOLET		
FC	24 modules 24 fibers	 266-PKM02-24B10	SC SX	24 modules 24 fibers	 266-PKM02-24B3Z	 266-PKM02-24B3Y	 266-PKM02-24B3C	-
ST	24 modules 24 fibers	 266-PKM02-24B20	LC DX	24 modules 48 fibers	 266-PKM02-24B4Z	 266-PKM02-24B4Y	 266-PKM02-24B4C	 266-PKM02-24B4D
Panels with White Bezels			BLUE	GREEN	AQUA	HEATHER VIOLET		
FC	24 modules 24 fibers	 266-PKM02-24A10	SC SX	24 modules 24 fibers	 266-PKM02-24A3Z	 266-PKM02-24A3Y	 266-PKM02-24A3C	-
ST	24 modules 24 fibers	 266-PKM02-24A20	LC DX	24 modules 48 fibers	 266-PKM02-24A4Z	 266-PKM02-24A4Y	 266-PKM02-24A4C	 266-PKM02-24A4D

All adapters are equipped with zirconia-ceramic split sleeves compatible with MM and SM fibers.  
Keystone modules with adapters of other colors are available as special orders, minimum order quantity – equivalent of 96 keystone modules of each color.

## CHARACTERISTICS

- Form-factor: 19-in rack/cabinet mounting standard (EIA-ECA-310-E).
- Capacity: twenty-four keystone modules; up to 24 optical fibers (FC, ST, SC SX adapters); up to 48 optical fibers (LC DX adapters).
- Materials: 1.5-mm (16-GA) CRS; black powder coating.
- Cable management: front and rear, removable, interchangeable.
- Environmental: operating temperature: -20 °C–+70 °C (-4 °F–+158 °F); operating humidity: ≤95 % RH non-condensing.
- Dimensions: W: 485 mm (19 in); H: 44.5 mm (1.75 in) [1 RMU]; D: 15 mm (0.6 in).
- Weight: 0.6 kg (1.32 lb)



Cable Management Bars	P64
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## Keystone Module Panels

AVAILABLE Q1 2022

266-PKM02-D8000

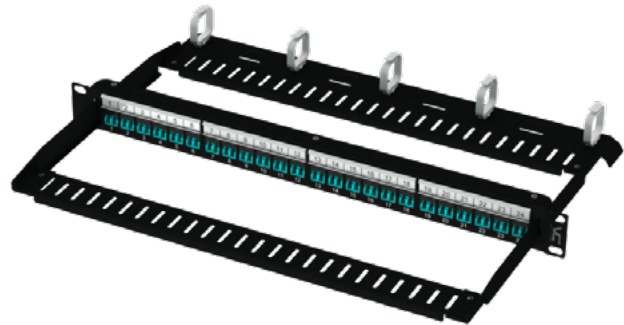
Optical Fiber Rack-Mount Panel, Keystone Module, 1-RMU, Unloaded, Front & Rear CMB, 48-Position

266-PKM02-D8Axx




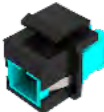



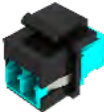

Optical Fiber Rack-Mount Panel, Keystone Module, 1-RMU, White Bezels, Front & Rear CMB, 48-Position

266-PKM02-D8Bxx










Optical Fiber Rack-Mount Panel, Keystone Module, 1-RMU, Black Bezels, Front & Rear CMB, 48-Position



### Panels with Black Bezels

				BLUE	GREEN	AQUA	HEAVER VIOLET
FC	24 modules 24 fibers	 266-PKM02-D8B10	SC SX 24 modules 24 fibers	 266-PKM02-D8B3Z	 266-PKM02-D8B3Y	 266-PKM02-D8B3C	-
ST	24 modules 24 fibers	 266-PKM02-D8B20	LC DX 24 modules 48 fibers	 266-PKM02-D8B4Z	 266-PKM02-D8B4Y	 266-PKM02-D8B4C	 266-PKM02-D8B4D

### Panels with White Bezels

				BLUE	GREEN	AQUA	HEAVER VIOLET
FC	24 modules 24 fibers	 266-PKM02-D8A10	SC SX 24 modules 24 fibers	 266-PKM02-D8A3Z	 266-PKM02-D8A3Y	 266-PKM02-D8A3C	-
ST	24 modules 24 fibers	 266-PKM02-D8A20	LC DX 24 modules 48 fibers	 266-PKM02-D8A4Z	 266-PKM02-D8A4Y	 266-PKM02-D8A4C	 266-PKM02-D8A4D

All adapters are equipped with zirconia-ceramic split sleeves compatible with MM and SM fibers.

Keystone modules with adapters of other colors are available as special orders, minimum order quantity – equivalent of 96 keystone modules of each color.



### CHARACTERISTICS

- Form-factor: 19-in rack/cabinet mounting standard (EIA-ECA-310-E).
- Capacity: forty-eight keystone modules; up to 48 optical fibers (FC, ST, SC SX adapters); up to 96 optical fibers (LC DX adapters).
- Materials: 1.5-mm (16-GA) CRS; black powder coating.
- Cable management: front and rear, removable, interchangeable.
- Labeling: four plastic label holders, plain-paper label inserts.
- Environmental: operating temperature: -20 °C–+70 °C (-4 °F–+158 °F); operating humidity: ≤95 % RH non-condensing.
- Dimensions: W: 485 mm (19 in); H: 44.5 mm (1.75 in) [1 RMU]; D: 15 mm (0.6 in).
- Weight: 0.6 kg (1.32 lb)

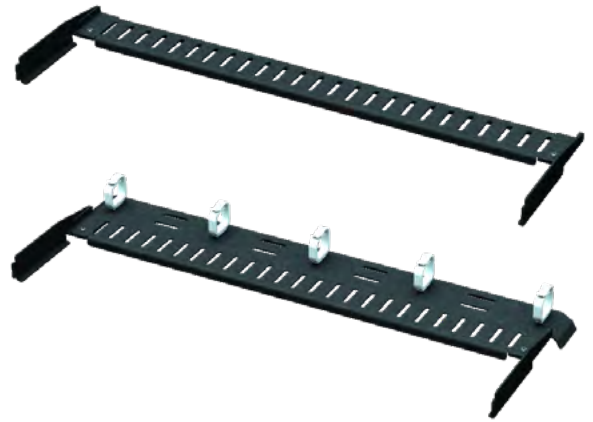
Keystone Modules	P58
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# CROSS-CONNECT ▶ Rack-Mount Panels

## Cable Management Bars

266-CFM00-2A3 Cable Management Bar, General Purpose, 3-in Depth  
 266-CFM00-2A4 Cable Management Bar, General Purpose, 4-in Depth

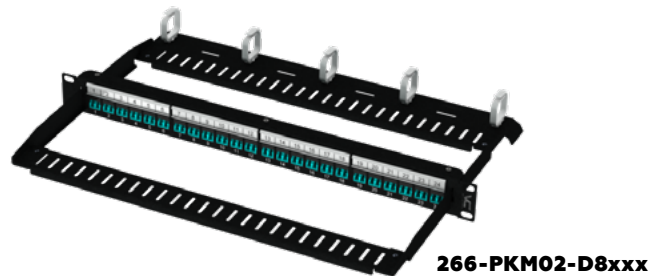
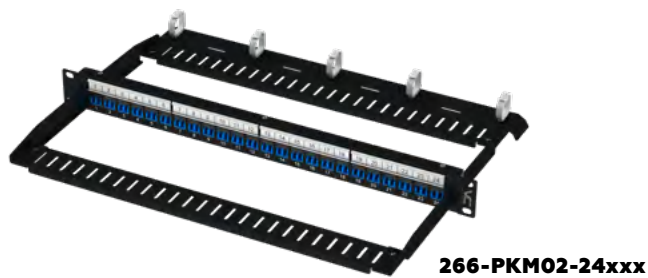
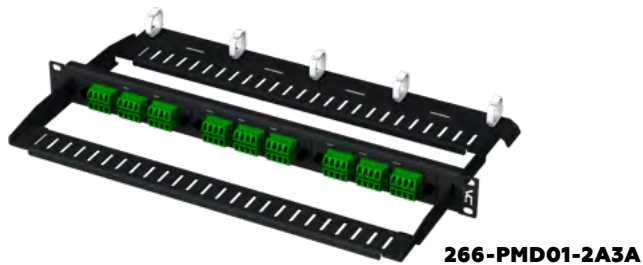
266-CFM00-2B3 Cable Management Bar, Optical Fiber, 3-in Depth  
 266-CFM00-2B4 Cable Management Bar, Optical Fiber, 4-in Depth



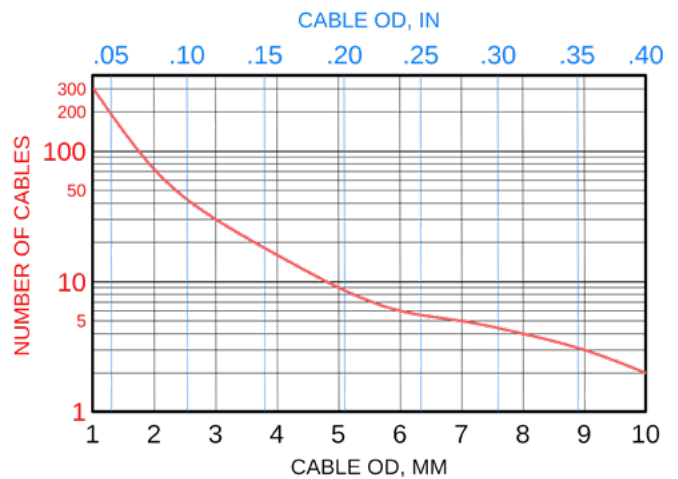
### CHARACTERISTICS

Compatibility: 266-PMD01-2A3A 266-PKM02-24Axx 266-PKM02-D8Axx 266-PKM02-D8Bxx	General Purpose		Optical Fiber	
	266-CFM00-2A3 3-inch	266-CFM00-2A4 4-inch	266-CFM-2B3 3-inch	266-CFM-2B4 4-inch
Materials:	1.5-mm (16-GA) CRS; black powder coating.			
Width:	430 mm (16.9 in)			
Height:	25 mm (1.0 in)			
Depth, clearance:	75 mm (3.0 in)	100 mm (4.0 in)	75 mm (3.0 in)	100 mm (4 in)
Depth, overall:	115 mm (4.5 in)	140 mm (5.5 in)	160 mm (6.3 in)	190 mm (7.5 in)
Shipping dimensions:	W: 470 mm, D: 42 mm, H: 25 mm (W: 18.5 in, D: 1.7 in, H: 1 in)		W: 470 mm, D: 90 mm, H: 25 mm (W: 18.5 in, D: 3.5 in, H: 1 in)	
Weight:	240 g (8.5 oz)		450 g (15.9 oz)	

OPTICAL FIBER SYSTEMS



Cable management ring capacity:





# CROSS-CONNECT ▶ Rack-Mount Enclosures

267-RES01-1C1  
 267-RES01-1F2  
 267-RES01-1L4

Optical Fiber Rack-Mount Enclosure, Standard-Series, LGX, Three-Position, 1 RMU  
 Optical Fiber Rack-Mount Enclosure, Standard-Series, LGX, Six-Position, 2 RMU  
 Optical Fiber Rack-Mount Enclosure, Standard-Series, LGX, Twelve-Position, 4 RMU



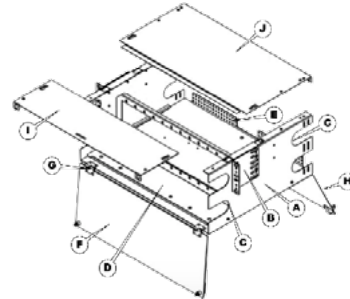
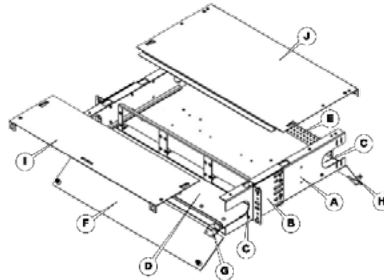
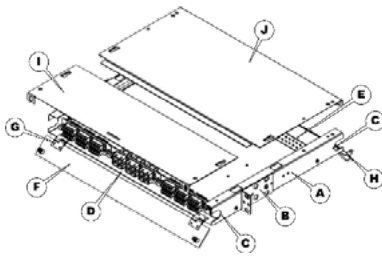
**267-RES01-1C1**



**267-RES01-1F2**



**267-RES01-1L4**



## CHARACTERISTICS

**Form-factor:** 19-in/23-in rack/cabinet mounting standard (EIA-ECA-310-E).  
**Mounting:** two depth levels.  
**Adapter plate format:** LGX.  
**Access:** front and rear, retractable stage.  
**Doors:** front: clear plastic, hinged, removable;  
 rear: metal, hinged, removable.  
**Covers:** front and rear, removable (screw joints).  
**Cable management:** grommeted entry points; perforated cable anchor plates; strength element anchor points (screw joints); set of cable ties and Velcro® tie wraps.  
**Fiber management:** spools, rings.  
**Materials:** 1.5-mm (16-GA) CRS; black powder coating.  
**Environmental:** operating temperature: -20 °C–+70 °C (-4 °F–+158 °F); operating humidity: ≤95 % RH non-condensing.

- A: main tray.
- B: mounting brackets (19-in/23-in), two depth levels.
- C: cable entry openings with grommets.
- D: retractable stage with frame for mounting adapter plates, cable/fiber management, options for mounting splice trays.
- E: cable anchor points with optional screw terminals for fixing cable strength members.
- F: front cover, hinged, removable, transparent plastic.
- G: split hinges.
- H: rear cover, hinged, removable, solid metal.
- I: front cover, removable.
- J: rear cover, removable.

Capacity:	267-RES01-1C1	267-RES01-1F2	267-RES01-1L4
Adapter plates:	3	6	12
Optical fibers:	up to 72	up to 144	up to 288
Splice trays:	2 × 24 fibers	6 × 24 fibers	12 × 24 fibers

Dimensions:	267-RES01-1C1	267-RES01-1F2	267-RES01-1L4
Width, flange:	483 mm (19 in)		
Width, frame:	433 mm (17 in)		
Height:	1 RMU 44 mm (1.75 in)	2 RMU 89 mm (3.50 in)	4 RMU 178 mm (7.00 in)
Depth:	354 mm (14.0 in)		
Weight:	6.6 kg (14.5 lb)	7.9 kg (17.5 lb)	9.8 kg (21.5 lb)



Splice Trays/Cassettes	P74
Adapter Plates	P84

OPTICAL FIBER SYSTEMS

# RACK-MOUNT SUITE



*All you need in one place:*

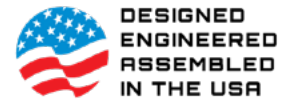
ADAPTER PLATE PANELS  
RACK-MOUNT ENCLOSURES  
ADAPTER PLATES & ADAPTERS  
SPLICE TRAYS/CASSETTES  
SPLICE HOLDERS, SLEEVES  
PIGTAILS - 1 & 12-FIBER  
PATCH CORDS  
INDOOR/OUTDOOR CABLES  
RACKS, TOOL KITS, TESTERS

[VERTICALCABLE.COM/FIBER](http://VERTICALCABLE.COM/FIBER)

Adapter Plate Enclosures

267-REB01-1C1

Optical Fiber Rack-Mount Enclosure, Budget-Series, LGX, Three-Position, 1 RMU



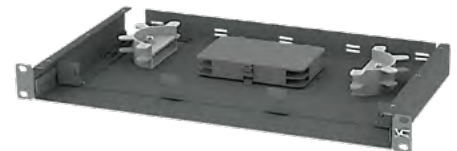
*LIGHT & COMPACT*

**CHARACTERISTICS**

- Form-factor: 19-in rack/cabinet mounting standard (EIA-ECA-310-E).
- Mounting: one depth level, flush with mounting flanges.
- Capacity: three LGX adapter plates; up to 72 optical fibers; up to two 24-fiber splice trays (265-CAS01-1B2 or 265-CAS01-2B2).
- Access: front and rear; retractable stage, front and rear.
- Doors: no doors.
- Cover: one-piece, removable (screw joints).
- Cable management: two rear cable entry openings; anchor bridge lances; set of cable ties and Velcro® tie wraps.
- Fiber management: spools, two levels.
- Materials: 1.5-mm (15-GA) aluminum alloy; black powder coating.
- Environmental: operating temperature: -20 °C--+70 °C (-4 °F--+158 °F); operating humidity: ≤95 % RH non-condensing.
- Dimensions: width: flange: 483 mm (19.0 in); frame: 440 mm (17.3 in); height: 1 RMU 44 mm (1.75 in); depth: 285 mm (11.2 in).
- Weight: 1.6 kg (3.5 lb).



with cover removed



with two 265-CAS01-1B2 installed



with two 265-CAS01-2B2 installed

Adapter Plates	P74
Splice Trays/Cassettes	P84

OPTICAL FIBER SYSTEMS

Adapter Plate Enclosures

- 268-STD01-1B1      Optical Fiber Wall-Mount Enclosure, Standard-Series, Single-Door, LGX, Two-Position, Latch
- 268-STD01-1D1      Optical Fiber Wall-Mount Enclosure, Standard-Series, Single-Door, LGX, Four-Position, Latch
- 268-STD02-1B12      Optical Fiber Wall-Mount Enclosure, Standard-Series, Dual-Door, LGX, Two-Position, Lock/Latch
- 268-STD02-1D12      Optical Fiber Wall-Mount Enclosure, Standard-Series, Dual-Door, LGX, Four-Position, Lock/Latch



268-STD01-1D1



268-STD02-1D12

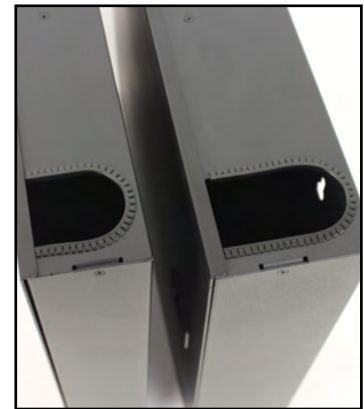


OPTICAL FIBER SYSTEMS

CHARACTERISTICS

Capacity:	268-STD01-1B1	268-STD02-1B12	268-STD01-1D1	268-STD02-1D12
Adapter plates:	2		4	
Optical fibers:	up to 48		up to 96	
Splice trays:	2 × 24 fibers		4 × 24 fibers	
Access:	268-STD01-1B1	268-STD01-1D1	268-STD02-1B12	268-STD02-1D12
Door:	1 door opens sideways		2 doors 1 <sup>st</sup> : latch, opens sideways 2 <sup>nd</sup> : lock: opens downward	
Lock:	latch		lock, latch	

- Adapter plate format:      LGX.
- Mounting:                      surface/wall;
- Cable management:        grommets entry points;  
                                        perforated cable anchor plates;  
                                        strength element anchor points (screw joints);  
                                        set of cable ties and Velcro® tie wraps.
- Fiber management:        spools, rings.
- Materials:                      1.5-mm (16-GA) CRS;  
                                        black powder coating.
- Environmental:              operating temperature: -20 °C–+70 °C (-4 °F–+158 °F);  
                                        operating humidity:      ≤95 % RH non-condensing.



Dimensions:	268-STD01-1B1	268-STD01-1D1	268-STD02-1B12	268-STD02-1D12
Width:	350 mm (13.8 in)	350 mm (13.8 in)	310 mm (12.2 in)	360 mm (14.2 in)
Height:	300 mm (11.8 in)	300 mm (11.8 in)	165 mm (6.5 in)	290 mm (11.4 in)
Depth:	65 mm (2.6 in)	85 mm (3.4 in)	115 mm (4.5 in)	105 mm (4.1 in)
Weight:	3 lb	9.5 lb	8.3 lb	12 lb

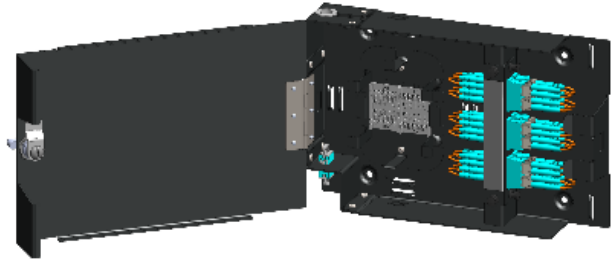
Adapter Plates	P74
Splice Trays/Cassettes	P84



AVAILABLE Q4 2021



**EZ-Xcess**

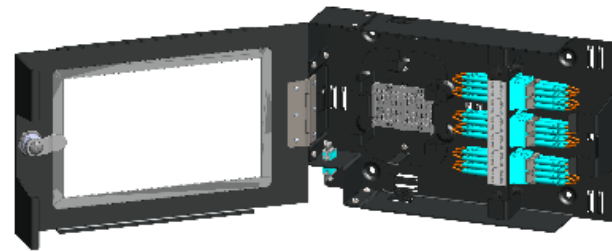


**EZX Series – Optical Fiber Wall-Mount Enclosures, LGX, Blank Door**

	1-Position	2-Position	4-Position
Cam Latch	268-EZX01-1A1	268-EZX01-1B1	268-EZX01-1D1
Cam Lock	268-EZX01-1A2	268-EZX01-1B2	268-EZX01-1D2



**EZ-View**



**EZV Series – Optical Fiber Wall-Mount Enclosure, LGX, Viewport Door**

	1-Position	2-Position	4-Position
Cam Latch	268-EZV01-1A1	268-EZV01-1B1	268-EZV01-1D1
Cam Lock	268-EZV01-1A2	268-EZV01-1B2	268-EZV01-1D2



**CHARACTERISTICS**

- Adapter plate format: LGX.
- Access: single door; cam latch or cam lock options.
- Mounting: surface/wall; left- or right-hand independent.
- Cable management: cable entry port adapters; cable anchor points (bridge lances); set of cable ties and Velcro® tie wraps.
- Fiber management: FM spools (default); FM stage (optional).
- Labeling: removable label holder, plain paper inserts.
- Materials: 1.5-mm (15-GA) aluminum alloy; black powder coating.
- Environmental: operating temperature: -20 °C--+70 °C (-4 °F--+158 °F); operating humidity: ≤95 % RH non-condensing.

Capacity:	Adapter plates	Fibers	Splice trays	Splice holders
1-position	1	up to 12	—	1 or 2
2-position	2	up to 24	1 or 2	—
4-position	4	up to 48	1 or 2	—

Dimensions:	1-position	2-position	4-position
Width:	280 mm (11 in)	300 mm (12 in)	300 mm (12 in)
Height:	180 mm (7 in)	280 mm (11 in)	280 mm (11 in)
Depth:*	50 mm (2 in)	50 mm (2 in)	90 mm (3.5 in)

\* Without protruding parts of locks and latches.



**EZ-View**



**EZ-Xcess**

OPTICAL FIBER SYSTEMS

# CROSS-CONNECT ▶ Surface- and Wall-Mount Enclosures Accessories

## Cable entry adapters

### "L" Shapes



268-ACC01-1A0	bracket material:	aluminum alloy.
268-ACC01-1B1	cable diameter:	≤20 mm (0.8 in);
	grommet material:	TPE, UL 94-V2;
	bracket material:	aluminum alloy.
268-ACC01-1C1	cable diameter:	≤12 mm (0.5 in);
	grommet material:	TPE, UL 94-V2;
	bracket material:	aluminum alloy.
268-ACC01-1D1	cable diameter:	≤8 mm (0.3 in);
	grommet material:	TPE, UL 94-V2;
	bracket material:	aluminum alloy.
268-ACC01-2A0	gland form-factor:	M12/PG7;
	cable diameter:	≤6.5 mm (0.25 in);
	gland material:	polyamide/neoprene;
	bracket material:	aluminum alloy.

### "M" Shapes



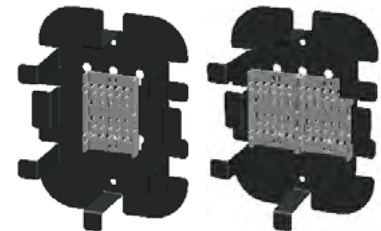
268-ACC01-2A0	bracket material:	aluminum alloy.
268-ACC01-2B1	cable diameter:	≤12 mm (0.5 in);
	grommet material:	TPE, UL 94-V2;
	bracket material:	aluminum alloy.
268-ACC01-2C1	cable diameter:	≤8 mm (0.3 in);
	grommet material:	TPE, UL 94-V2;
	bracket material:	aluminum alloy.
268-ACC01-2D1	connector type:	1x MPO adapter, Type A, black, flanged;
	mounting:	lateral;
	bracket material:	aluminum alloy.
268-ACC01-2E1	connector type:	1x MPO adapter, Type A, black, flanged;
	mounting:	transversal;
	bracket material:	aluminum alloy.
268-ACC01-2F2	connector type:	2x MPO adapter, Type A, black, flanged;
	mounting:	lateral;
	bracket material:	aluminum alloy.
268-ACC01-2G2	connector type:	2x MPO adapter, Type A, black, flanged;
	mounting:	transversal;
	bracket material:	aluminum alloy.
268-ACC01-2H1	gland form-factor:	M12/PG7;
	cable diameter:	≤6.5 mm (0.25 in);
	gland material:	polyamide/neoprene;
	bracket material:	aluminum alloy.

## Fiber-Management/Splicing Stages

- 268-ACC03-11-xy Accessory FM/Splicing Stage, EZX/EZV-Series 1-Position, 1 Splice Holder
- 268-ACC03-12-xy Accessory FM/Splicing Stage, EZX/EZV-Series 1-Position, 2 Splice Holders

Substitute "x" in PN with:  
 "O": no sleeves;  
 "A": 2 sleeves;  
 "B": 4 sleeves;  
 "C": 6 sleeves;  
 "D": 8 sleeves;  
 "E": 12 sleeves;  
 "F": 24 sleeves (268-ACC03-12 only).

Substitute "y" in PN with:  
 "O": no sleeves;  
 "A": 40-mm sleeves.



268-ACC03-11

268-ACC03-12

Splice holder capacity: twelve splice sleeves, stacked in two rows in six positions.  
 Each splice holder supplied with twelve 2.5 mm × 40 mm sleeves (265-SLV01-3A).

- 268-ACC03-xy Accessory FM/Splicing Stage, EZX/EZV-Series 2- & 4-Position, 1 Splice Tray
- 268-ACC03-xy Accessory FM/Splicing Stage, EZX/EZV-Series 2- & 4-Position, 2 Splice Trays

Substitute "x" in PN with:  
 "O": no sleeves;  
 "A": 2 sleeves;  
 "B": 4 sleeves;  
 "C": 6 sleeves;  
 "D": 8 sleeves;  
 "E": 12 sleeves;  
 "F": 24 sleeves.

Substitute "y" in PN with:  
 "O": no sleeves;  
 "A": 40-mm sleeves.



268-ACC03-21

268-ACC03-22

Splice tray capacity: two six-position splice holders.  
 Splice holder capacity: twelve splice sleeves, stacked in two rows in six positions.  
 Each splice holder supplied with twelve 2.5 mm × 40 mm sleeves (265-SLV01-3A).

Splice Sleeves	P86
Splice Trays/Cassettes	P84

# CROSS-CONNECT ▶ Surface- and Wall-Mount Enclosures

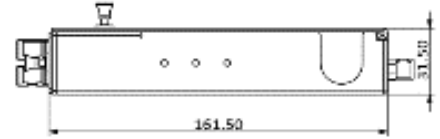
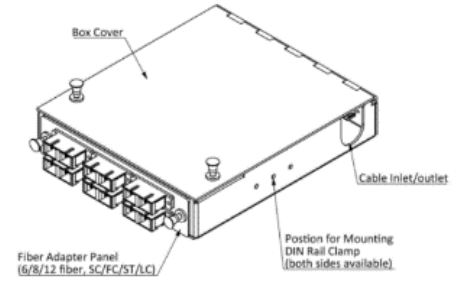
## Adapter Plate Surface-Mount Box

268-SMB01-1A1

Optical Fiber Surface-Mount Box, Standard-Series, LGX, One-Position

### CHARACTERISTICS

- Capacity: one LGX adapter plate;  
up to 24 optical fibers;  
up to two 12-fiber splice holders.
- Materials: 1.5-mm (15-GA) aluminum alloy;  
black powder coating.
- Access: single door, panel fasteners ("push-pins"/"plunger locks").
- Mounting: surface/wall.
- Cable management: two grommeted entry openings;  
two mounting positions for MPO adapters;  
cable anchor points;  
set of cable ties.
- Fiber management: anchor points, rings.
- Environmental: operating temperature: -20 °C--+70 °C (-4 °F--+158 °F);  
operating humidity: ≤95 % RH non-condensing.
- Dimensions: W: 160 mm (6.3 in), H: 140 mm (1.6 in), D: 32 mm (1.3 in).



Adapter Plates	P74
Splice Holders	P88

OPTICAL FIBER SYSTEMS

## EZ Mount Series Cassette

Adapter Plates	P74
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268-EZM01-1A      DIN-Rail Modular Cassette, EZ Mount Series

### ACCESSORIES

268-EZM01-1A00	268-EZM01-1A00 Cable Entry Adapter – Blank
268-EZM01-1A01	268-EZM01-1A01 Cable Entry Adapter – Pass-Through
268-EZM01-1A02	268-EZM01-1A02 Cable Entry Adapter – 1× MPO
268-EZM01-1A03	268-EZM01-1A03 Cable Entry Adapter, – 2× MPO
268-EZM01-1A04	268-EZM01-1A04 Cable Entry Adapter – 15-mm Grommet
268-EZM01-1A05	268-EZM01-1A05 Cable Entry Adapter– 20-mm Grommet
268-EZM01-1A06	268-EZM01-1A06 Cable Entry Adapter – M12/PG7 Cable Gland
268-EZM01-1A11	268-EZM01-1A11 Splice Holder, Set of 1
268-EZM01-1A12	268-EZM01-1A12 Splice Holder, Set of 2



### CHARACTERISTICS

- Compatibility:** all Vertical Cable 264-MAP and 264-LAP series adapter plates.
- Mounting:** 35-mm DIN rail; detachable DIN-rail clip.
- Materials:** aluminum alloy; black powder coating.
- Capacity:** one LGX adapter plate; up to 24 fibers (264-LAP series adapter plates); up to 6 keystone modules (264-MAP01-1A06 adapter plate); 1 or 2 splice holders, 12 fibers per holder, 24 fibers total; 1 or 2 cable entry point adapters (see accessories).
- Cable management:** cable anchor point (bridge lance); fiber/splice management stage, removable; set of cable ties.
- Dimensions:** W: 35 mm (1.4 in) [2 DU], H: 170 mm (6.7 in), D: 150 mm (6 in).
- Weight:** 350 g (12.5 oz).
- Compliance:** IEC/EN 60715; DIN 43880; ANSI/TIA-568.3-D; GR-769; Directive 2011/65/EU Am. 2015/863/EU (RoHS2).
- DIN-rail clip:** material: fiberglass-reinforced nylon 66 (PA66, GF: 30 %); width: 35 mm; mounting: spring-loaded latch; compliance: Directive 2011/65/EU Am. 2015/863/EU (RoHS2).
- Environmental:** operating temperature: -10 °C–60 °C (14 °F–140 °F); storage temperature: -40 °C–70 °C (-40 °F–158 °F); operating humidity: 93 % RH max non-condensing.

OPTICAL FIBER SYSTEMS

	268-EZM01-1A00	268-EZM01-1A01	268-EZM01-1A02	268-EZM01-1A03	268-EZM01-1A04	268-EZM01-1A05	268-EZM01-1A06
Plate materials:	aluminum alloy, black powder coating						
Plate dimensions:	60 mm × 30 mm (2.4 in × 1.2 in)						
Grommet material:	Thermoplastic Elastomer, TPE (UL 94 V-2)						
Opening size:		40 mm × 20 mm (1.6 in × 0.8 in)			cable O.D.: ≤8 mm (0.3 in)	cable O.D.: ≤12 mm (0.5 in)*	cable O.D.: ≤6.5 mm (0.25 in)
Gland form-factor:							M12/PG7
Gland material:							polyamide / neoprene

\* 268-EZM01-1A05 due to its grommet size can be used only in the top position.



This modular design allows to place the cassette in three different positions within the bay:



1. Full depth: operating position - cassette is completely covered and protected by the bay and fixed to it with the help of a thumb screw.



2. Half-depth: this position allows to perform manipulations on the LGX adapter plate connections without removing the cassette from the bay.



Kit includes:  
Bay x 1; Cassette x 1; FM stage x 1; DIN-Rail Clip x 1; Cable Tie x 2.

**Blank Plate:**



Keystone **Module** Adapter Plate



Optical Fiber Adapter Plate



3. "Zero" depth: all cassette internal components can be accessed for servicing and adjustments.



OPTICAL FIBER SYSTEMS

# COMPONENTS AND ACCESSORIES ▶ LGX Adapter Plates

## Blank Plate:



## Keystone Module Adapter Plate



## ST and FC Bulkhead Adapters – DD Flange:

Positions Fibers	6	8	12
FC	264-LAP01-1A06A 	264-LAP01-2A08A 	264-LAP01-2A12A 
ST	264-LAP02-1A06A 	264-LAP02-2A08A 	264-LAP02-2A12A 

### HOW TO CHOOSE CORRECT PN

Tables below allow to choose the PN you need using a visual identification of adapter plates and adapters.

- STEP 1** Find the adapter type you need in one of the horizontal rows.
- STEP 2** Choose at the top of the table the column with the type of adapter plate you need.
- STEP 3** At the intersection of the row and column find the PN for the finished product.

Positions Fibers	6	8	12
FC	264-LAP01-1A06A 	264-LAP01-2A08A 	264-LAP01-2A12A 
ST	264-LAP02-1A06A 	264-LAP02-2A08A 	264-LAP02-2A12A 

(Optical Fiber Adapter Plate, FC, 8-position/8-fiber)

## SC and LC Flangeless Adapters – Spring Retaining:

Positions Fibers	4		6		8		3		4		6	
	SC SX	LC DX	SC SX	LC DX	SC SX	LC DX	SC DX	LC QX	SC DX	LC QX	SC DX	LC QX
Blue	264-LAP03-1A4Z1 	264-LAP03-1A6Z1 	264-LAP03-1A8Z1 	264-LAP03-1B3Z1 	264-LAP03-2B4Z1 	264-LAP03-2B6Z1 	Blue	Blue	Blue	Blue	Blue	Blue
Green	264-LAP03-1A4Y1 	264-LAP03-1A6Y1 	264-LAP03-1A8Y1 	264-LAP03-1B3Y1 	264-LAP03-2B4Y1 	264-LAP03-2B6Y1 	Green	Green	Green	Green	Green	Green
Aqua	264-LAP03-1A4C1 	264-LAP03-1A6C1 	264-LAP03-1A8C1 	264-LAP03-1B3C1 	264-LAP03-2B4C1 	264-LAP03-2B6C1 	Aqua	Aqua	Aqua	Aqua	Aqua	Aqua
Blue	264-LAP04-1B4Z1 	264-LAP04-1B6Z1 	264-LAP04-1B8Z1 	264-LAP04-1C3Z1 	264-LAP04-2C4Z1 	264-LAP04-2C6Z1 	Blue	Blue	Blue	Blue	Blue	Blue
Green	264-LAP04-1B4Y1 	264-LAP04-1B6Y1 	264-LAP04-1B8Y1 	264-LAP04-1C3Y1 	264-LAP04-2C4Y1 	264-LAP04-2C6Y1 	Green	Green	Green	Green	Green	Green
Aqua	264-LAP04-1B4C1 	264-LAP04-1B6C1 	264-LAP04-1B8C1 	264-LAP04-1C3C1 	264-LAP04-2C4C1 	264-LAP04-2C6C1 	Aqua	Aqua	Aqua	Aqua	Aqua	Aqua
H.Violet	264-LAP04-1B4D1 	264-LAP04-1B6D1 	264-LAP04-1B8D1 	264-LAP04-1C3D1 	264-LAP04-2C4D1 	264-LAP04-2C6D1 	H.Violet	H.Violet	H.Violet	H.Violet	H.Violet	H.Violet

Adapters of other colors are available as special orders, minimum order quantity – equivalent of 96 adapters of each color.



OPTICAL FIBER SYSTEMS

# Modular Connector Assemblies LGX Adapter Plates

## SC and LC Flanged Adapters – Screw Retaining:

Positions		4		6		8		3		4		6	
Fibers		SC SX	LC DX	SC SX	LC DX	SC SX	LC DX	SC DX	LC QX	SC DX	LC QX	SC DX	LC QX
		4	8	6	12	8	16	6	12	8	16	12	24
SC	Blue	264-LAP03-1A4Z2 	264-LAP03-1A6Z2 	264-LAP03-1A8Z2 	264-LAP03-1B3Z2 	264-LAP03-1B4Z2 	264-LAP03-1B6Z2 						
	Green	264-LAP03-1A4Y2 	264-LAP03-1A6Y2 	264-LAP03-1A8Y2 	264-LAP03-1B3Y2 	264-LAP03-1B4Y2 	264-LAP03-1B6Y2 						
	Aqua	264-LAP03-1A4C2 	264-LAP03-1A6C2 	264-LAP03-1A8C2 	264-LAP03-1B3C2 	264-LAP03-1B4C2 	264-LAP03-1B6C2 						
LC	Blue	264-LAP04-1B4Z2 	264-LAP04-1B6Z2 	264-LAP04-1B8Z2 	264-LAP04-1C3Z2 	264-LAP04-1C4Z2 	264-LAP04-1C6Z2 						
	Green	264-LAP04-1B4Y2 	264-LAP04-1B6Y2 	264-LAP04-1B8Y2 	264-LAP04-1C3Y2 	264-LAP04-1C4Y2 	264-LAP04-1C6Y2 						
	Aqua	264-LAP04-1B4C2 	264-LAP04-1B6C2 	264-LAP04-1B8C2 	264-LAP04-1C3C2 	264-LAP04-1C4C2 	264-LAP04-1C6C2 						
	HViolet	264-LAP04-1B4D2 	264-LAP04-1B6D2 	264-LAP04-1B8D2 	264-LAP04-1C3D2 	264-LAP04-1C4D2 	264-LAP04-1C6D2 						

## MPO Flangeless Adapters – Spring Retaining:

Positions		4		6		8	
MPO	Black <sup>1</sup>	264-LAP05-1C4B1 	264-LAP05-1C6B1 	264-LAP05-1C8B1 			
	Blue <sup>2</sup>	264-LAP05-1C4Z1 	264-LAP05-1C6Z1 	264-LAP05-1C8Z1 			
	Green <sup>2</sup>	264-LAP05-1C4Y1 	264-LAP05-1C6Y1 	264-LAP05-1C8Y1 			
	Aqua <sup>2</sup>	264-LAP05-1C4C1 	264-LAP05-1C6C1 	264-LAP05-1C8C1 			

<sup>1</sup> Universal, Type A: Key-Up/Key-Down  
<sup>2</sup> Switchable Key

## MPO Flanged Adapters – Screw Retaining:

Positions		4		6		8	
MPO	Black <sup>1</sup>	264-LAP05-1A4B2 	264-LAP05-1A6B2 	264-LAP05-1A8B2 			

<sup>1</sup> Universal, Type A: Key-Up/Key-Down

## Color code reference (per ANSI/TIA-568.3):

### BLUE

adapter is intended to be used for connecting cabling based on SM fiber and UPC plugs.

### GREEN

adapter is intended to be used for connecting cabling based on SM fiber and APC plugs.

### AQUA

adapter is intended to be used for connecting cabling based on OM3 fiber.

### HEATHER VIOLET














adapter is intended to be used for connecting cabling based on OM4 fiber.

*Please, note that adapter body color is used for identification purposes only and does not denote adapter's transmission performance. All Vertical Cable's adapters are equipped with the same zirconia ceramic split sleeves capable to efficiently connect all types of fibers.*

# CROSS-CONNECT ▶ LGX Adapter Plates

## CHARACTERISTICS


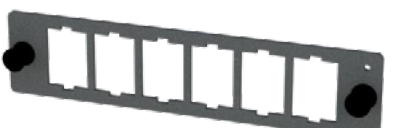















Plate format: LGX compatible.  
 Plate materials: plate: 1.5-mm (15-GA) lightweight aluminum alloy;  
 finish: black powder coating  
 panel fasteners: nylon/ABS.  
 Environmental: operating temperature: -20 °C--+70 °C (-4 °F--+158 °F);  
 operating humidity: ≤95 % RH non-condensing.  
 Dimensions: W: 130 mm (5.12 in), H: 29 mm (1.14 in);  
 mounting hole distance: 118 mm (4.65 in) etc.

Adapters:	FC	ST	SC				LC				MPO		
			SX		DX		DX		QX		Type A		K-switch
													
Fiber types:	SM 9/125, MM 50/125, MM 62.5/125												
Plug types:	UPC, APC												
Fiber counts:	1	1	1	1	2	2	2	2	4	4	12/24	12/24	12/24
Adapter sleeves:	Zirconia ceramic, split											-	
Insertion loss (IL):	0.3 dB or lower (when used with standard-compliant plugs)											0.35 dB (low-loss SM); 0.7 dB (SM); 0.35 dB (low-loss MM); 0.6 dB (MM).	
Return loss (RL):	UPC: 55 dB or more (when used with standard-compliant plugs); APC: 65 dB or more (when used with standard-compliant plugs).											-65 dB (8° low-loss SM); -65 dB (8° SM); -25 dB (low-loss MM); -25 dB (MM).	
Operating temperature:	-20 °C--+70 °C (-4 °F--+158 °F)												
Operating humidity:	≤95 % RH non-condensing												
Interface standard:	IEC 61754-13	IEC 61754-2	IEC 61754-4				IEC 61754-20				IEC 61754-7		
Compliance:	Regulation (EC) No 1907/2006 (REACH); Directive 2011/65/EU Am. 2015/863/EU (RoHS2);												
	-		ANSI/UL 94 V-0										
Compatibility:	Telcordia GR-326-CORE												

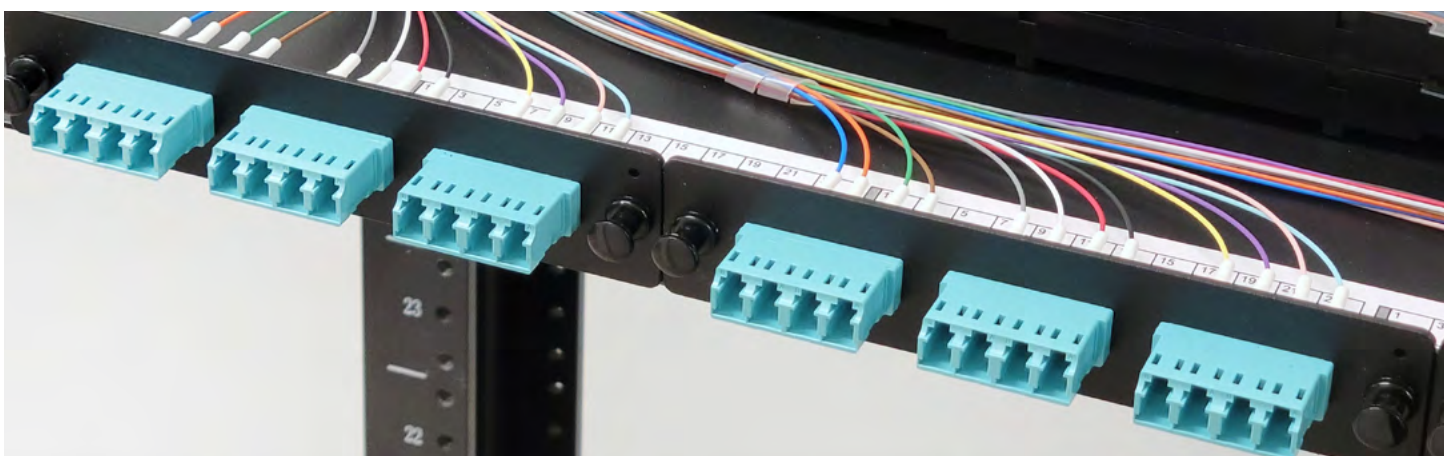
OPTICAL FIBER SYSTEMS



# Periodic Table of VC FIBER Adapter Plates

<p>BLANK</p> 	<p>KM 6P</p> 	<p>Periodic Table of VC fiber adapter Plates P180</p>
<p>FC/ST 6P DD</p> 	<p>FC/ST 8P DD</p> 	<p>FC/ST 12P DD</p> 
<p>SC SX/LC DX 4P NF</p> 	<p>SC SX/LC DX 6P NF</p> 	<p>SC SX/LC DX 8P NF</p> 
<p>SC SX/LC DX 4P MF</p> 	<p>SC SX/LC DX 6P MF</p> 	<p>SC SX/LC DX 8P MF</p> 
<p>SC DX/LC QX 3P NF</p> 	<p>SC DX/LC QX 4P NF</p> 	<p>SC DX/LC QX 6P NF</p> 
<p>SC DX/LC QX 3P MF</p> 	<p>SC DX/LC QX 4P MF</p> 	<p>SC DX/LC QX 6P MF</p> 

OPTICAL FIBER SYSTEMS



## LGX Cassettes

### BASE-8 MPO

AVAILABLE Q1 2022



Fibers:	8
Adapters:	front: 8 × SC SX rear: 1 × MPO-12
	264-MCA03A1Z8 [A][2]
	264-MCA03A1Y8 [A][2]
	264-MCA03A1C8 [A][2]

Fibers:	8
Adapters:	front: 4 × LC DX rear: 1 × MPO-12
	264-MCA04B1Z4 [A][2]
	264-MCA04B1Y4 [A][2]
	264-MCA04B1C4 [A][2]
	264-MCA04B1D4 [A][2]

Fibers:	8
Adapters:	front: 4 × SC DX rear: 1 × MPO-12
	264-MCA03B2Z4 [A][1]
	264-MCA03B2Y4 [A][1]
	264-MCA03B2C4 [A][1]

Fibers:	8
Adapters:	front: 2 × LC QX rear: 1 × MPO-12
	264-MCA04C2Z2 [A][1]
	264-MCA04C2Y2 [A][1]
	264-MCA04C2C2 [A][1]
	264-MCA04C2D2 [A][1]

### BASE-12 MPO



Fibers:	12
Adapt-ers:	front: 6 × LC DX rear: 1 × MPO-12
	264-MCA04B1Z6 [A][2]
	264-MCA04B1Y6 [A][2]
	264-MCA04B1C6 [A][2]
	264-MCA04B1D6 [A][2]

Fibers:	12
Adapt-ers:	front: 3 × LC QX rear: 1 × MPO-12
	264-MCA04C2Z3 [A][1]
	264-MCA04C2Y3 [A][1]
	264-MCA04C2C3 [A][1]
	264-MCA04C2D3 [A][1]

Fibers:	24
Adapt-ers:	front: 6 × LC QX rear: 2 × MPO-12
	264-MCA04C2Z6 [A][3]
	264-MCA04C2Y6 [A][3]
	264-MCA04C2C6 [A][3]
	264-MCA04C2D6 [A][3]

#### Method options:

Replace [letter] in PN with

- A: method A
- B: method B
- C: method C

#### Rear adapter orientation options:

Replace [digit] in PN with

- 1: MPO × 1 H
- 2: MPO × 1 V
- 3: MPO × 2 H
- 4: MPO × 2 V



Orientation (cable entry angle) of all rear adapter plates can be changed in the field by repositioning the adapter plate without disassembling the cassette LF-CR.

Factory default – central position.



**CHARACTERISTICS**








Compatibility:	LGX-compatible mounting hardware with the following minimum rear depth space: 200 mm (8.0 in) for enclosed units; 160 mm (6.5 in) for open units.	
Mounting:	standard LGX footprint and mechanism: overall profile dimensions: 30 mm × 130 mm (1.18 in × 5.12 in); mounting opening dimensions: 29 mm × 103 mm (1.14 in × 4.06 in) min; distance between mounting holes: 118 mm (4.65 in) ctc.	
Materials:	aluminum alloy; black powder coating; panel fasteners: nylon/ABS.	
Connectors:	front:	adapters: SC SX, SC DX, LC DX, LC QX; plugs: SC SX, LC SX;
	rear:	adapters: MPO-12 Type A flanged; plugs: MTP®-12 <sup>1</sup> (MTP® SM are all APC).
Insertion loss:	overall assembled cassette:	0.55 dB max;
	plugs:	SC SM: 0.20 dB typ 0.25 dB max; SC MM: 0.12 dB typ 0.20 dB max; LC SM: 0.13 dB typ 0.20 dB max; LC MM: 0.17 dB typ 0.20 dB max; MPO SM: 0.10 dB typ 0.35 dB max; MPO MM: 0.10 dB typ 0.35 dB max.
Return loss (RL):	UPC: ≥55 dB (when used with standard-compliant plugs); APC: ≥65 dB (when used with standard-compliant plugs).	
Adapter sleeves:	Zirconia ceramic split sleeves.	
Connector compliance:	IEC 61754-4 (type SC connector family), TIA-604-3 (FOCIS 3); IEC 61754-20 (type LC connector family), TIA-604-10 (FOCIS 10B); IEC 61754-7-1 (type MPO connector family), TIA-604-5 (FOCIS 5).	
Dimensions:	cassette box:	W: 130 mm (5.12 in), H: 29 mm (1.14 in), D: 130 mm (1.18 in);
	assembled cassette:	W: 130 mm (5.12 in), H: 29 mm (1.14 in), D: 130 mm–145 mm (5.12 in–5.7 in).
Weight:	cassette box:	150 g (5.3 oz);
	assembled cassette:	~200 g (7.0 oz), varies depending on configuration.
Environmental:	operating temperature:	-10 °C–60 °C (14 °F–140 °F);
	storage temperature:	-40 °C–70 °C (-40 °F–158 °F);
	operating humidity:	95 % RH max non-condensing.
Compatibility:	Telcordia GR-326-CORE.	
Compliance:	ANSI/TIA-568.3-D; GR-769; ANSI/UL 94 V-0; Regulation (EC) No 1907/2006 (REACH); Directive 2011/65/EU Am. 2015/863/EU (RoHS2).	

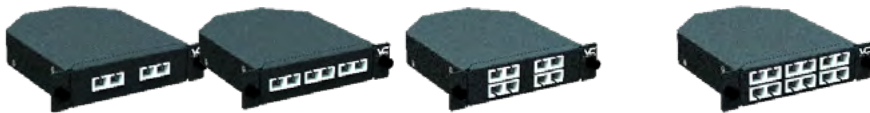
\* MTP® is a registered trademark by US Conec.




# COMPONENTS AND ACCESSORIES ▶ Modular Connector Assemblies

## Field-configurable cassettes







Fibers:	4	6	8	Fibers:	8	12	16
Adapters:	front: 4 × SC SX rear: M12 gland	front: 6 × SC SX rear: M12 gland	front: 8 × SC SX rear: M12 gland	Adapt- ers:	front: 4 × LC DX rear: M12 gland	front: 6 × LC DX rear: M12 gland	front: 8 × LC DX rear: M12 gland
	264-MCA03A1Z4-5	264-MCA03A1Z6-5	264-MCA03A1Z8-5		264-MCA04B1Z4-5	264-MCA04B1Z6-5	264-MCA04B1Z8-5
	264-MCA03A1Y4-5	264-MCA03A1Y6-5	264-MCA03A1Y8-5		264-MCA04B1Y4-5	264-MCA04B1Y6-5	264-MCA04B1Y8-5
	264-MCA03A1C4-5	264-MCA03A1C6-5	264-MCA03A1C8-5		264-MCA04B1C4-5	264-MCA04B1C6-5	264-MCA04B1C8-5
					264-MCA04B1D4-5	264-MCA04B1D6-5	264-MCA04B1D8-5



Fibers:	4	6	8	12
Adapters:	front: rear: 2 × SC DX M12 gland	front: rear: 3 × SC DX M12 gland	front: rear: 4 × SC DX M12 gland	front: rear: 6 × SC DX M12 gland
	264-MCA03B2Z2-5	264-MCA03B2Z3-5	264-MCA03B2Z4-5	264-MCA03B2Z6-5
	264-MCA03B2Y2-5	264-MCA03B2Y3-5	264-MCA03B2Y4-5	264-MCA03B2Y6-5
	264-MCA03B2C2-5	264-MCA03B2C3-5	264-MCA03B2C4-5	264-MCA03B2C6-5



Fibers:	8	12	16	24
Adapters:	front: rear: 2 × LC QX M12 gland	front: rear: 3 × LC QX M12 gland	front: rear: 4 × LC QX M12 gland	front: rear: 6 × LC QX M12 gland
	264-MCA04C2Z2-5	264-MCA04C2Z3-5	264-MCA04C2Z4-5	264-MCA04C2Z6-5
	264-MCA04C2Y2-5	264-MCA04C2Y3-5	264-MCA04C2Y4-5	264-MCA04C2Y6-5
	264-MCA04C2C2-5	264-MCA04C2C3-5	264-MCA04C2C4-5	264-MCA04C2C6-5
	264-MCA04C2D2-5	264-MCA04C2D3-5	264-MCA04C2D4-5	264-MCA04C2D6-5



Orientation (cable entry angle) of all rear adapter plates can be changed in the field by repositioning the adapter plate without disassembling the cassette LF-CR.

Factory default – central position.

EACH CASSETTE KIT INCLUDES:

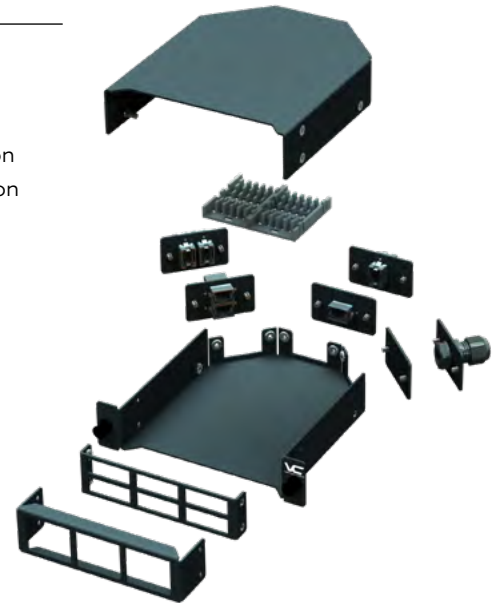
BASE WITH COVER;  
FRONT BRACKET WITH INSTALLED ADAPTERS;  
TWO BLANK REAR ADAPTER PLATES.

OPTICAL FIBER SYSTEMS



## ACCESSORIES

264-MCB01-A211	Rear Cable Entry Adapter: 1 × MPO, Type A, Lateral Orientation
264-MCB01-A221	Rear Cable Entry Adapter: 2 × MPO, Type A, Lateral Orientation
264-MCB01-A212	Rear Cable Entry Adapter: 1 × MPO, Type A, Transversal Orientation
264-MCB01-A221	Rear Cable Entry Adapter: 2 × MPO, Type A, Transversal Orientation
264-MCB01-A312	Rear Cable Entry Adapter: 1 × M12/PG7 Cable Gland
264-MCB01-A41	Splice Holder, Adhesive Mounting, Set of 1
264-MCB01-A42	Splice Holder, Adhesive Mounting, Set of 2



## CHARACTERISTICS

Compatibility:	LGX-compatible mounting hardware with the following minimum rear depth space: 200 mm (8.0 in) for enclosed units; 160 mm (6.5 in) for open units.	
Mounting:	standard LGX footprint and mechanism: overall profile dimensions:	30 mm × 130 mm (1.18 in × 5.12 in);
	mounting opening dimensions:	29 mm × 103 mm (1.14 in × 4.06 in) min;
	distance between mounting holes:	118 mm (4.65 in) etc.
Materials:	aluminum alloy; black powder coating; panel fasteners: nylon/ABS.	
Interfaces:	front: adapters:	SC SX, SC DX, LC DX, LC QX;
	rear: adapters:	MPO-12 Type A flanged (see accessories);
	cable gland:	M12/PG7.
Adapter IL:	SC, LC:	0.3 dB or lower (when used with standard-compliant plugs);
	MPO:	0.35 dB (low-loss SM); 0.7 dB (SM); 0.35 dB (low-loss MM); 0.6 dB (MM).
Return loss (RL):	SC, LC:	UPC: ≥55 dB (when used with standard-compliant plugs); APC: ≥65 dB (when used with standard-compliant plugs);
	MPO:	-65 dB (8° low-loss SM); -65 dB (8° SM); -25 dB (low-loss MM); -25 dB (MM).
Adapter sleeves:	zirconia ceramic split sleeves.	
Splicing:	one or two 12-position fusion-splice holders (see accessories).	
Connector compliance:	IEC 61754-4 (type SC connector family), TIA-604-3 (FOCIS 3); IEC 61754-20 (type LC connector family), TIA-604-10 (FOCIS 10B); IEC 61754-7-1 (type MPO connector family), TIA-604-5 (FOCIS 5).	
Dimensions:	cassette box:	W: 130 mm (5.12 in), H: 29 mm (1.14 in), D: 130 mm (1.18 in);
	assembled cassette:	W: 130 mm (5.12 in), H: 29 mm (1.14 in), D: 130 mm–145 mm (5.12 in–5.7 in).
Weight:	cassette box:	150 g (5.3 oz);
	assembled cassette:	~200 g (7.0 oz), varies depending on configuration.
Environmental:	operating temperature:	-10 °C–60 °C (14 °F–140 °F);
	storage temperature:	-40 °C–70 °C (-40 °F–158 °F);
	operating humidity:	95 % RH max non-condensing.
Compatibility:	Telcordia GR-326-CORE.	
Compliance:	ANSI/TIA-568.3-D; GR-769; ANSI/UL 94 V-0; Regulation (EC) No 1907/2006 (REACH); Directive 2011/65/EU Am. 2015/863/EU (RoHS2).	

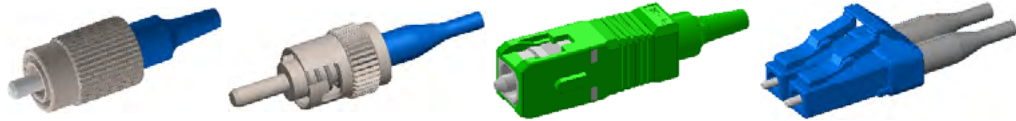
Epoxy Plugs

Plug type		SM UPC	SM APC	OM3	OM4	
FC		263-OFC01-1BZx	263-OFC01-1BYx			
ST		263-OFC02-1BZx				
SC	SX	263-OFC03-1BZx	263-OFC03-1BYx	263-OFC03-1BCx		
	DX	263-OFC03-2BZx	263-OFC03-2BYx	263-OFC03-2BCx		
LC	SX	Standard	263-OFC04-1BZx	263-OFC04-1BYx	263-OFC04-1BCx	263-OFC04-1BDx
		DX	Standard	263-OFC04-2BZx	263-OFC04-2BYx	263-OFC04-2BCx
		Unibody	263-OFC04-3BZx	263-OFC04-3BYx	263-OFC04-3BCx	263-OFC04-3BDx

Plugs of other colors are available as special orders, minimum order quantity – 100 plugs of each color.

Substitute "x" in PN with:

- "01": 1-pack;
- "06": 6-pack;
- "12": 12-pack;
- "24": 24-pack;
- "48": 48-pack;
- "96": 96-pack.



OPTICAL FIBER SYSTEMS


CHARACTERISTICS

	FC		ST	SC			LC			
	SM UPC	SM APC	SM UPC	SM UPC	SM APC	OM3	SM UPC	SM APC	OM3	OM4
Cable diameter:	0.9 mm									
Bore size:	125.5 µm	125.0 µm	125.5 µm	125.5 µm	125.0 µm	126.0 µm	125.5 µm	125.0 µm	126.0 µm	
Concentricity:	1.0 µm					4.0 µm	1.0 µm		4.0 µm	
Curvature radius:	10–25 mm						7–25 mm			
Apex offset:	0–50 µm									
Fiber height:	50–100 mm									
Boot size:	0.9 mm									
Boot color:	White									
Body color:	–	–	–	Blue	Green	Aqua	Blue	Green	Aqua	Violet
Insertion loss*:	≤0.3 dB									
Return loss*:	≥55 dB	≥65 dB	≥55 dB	≥55 dB	≥65 dB	≥35 dB	≥55 dB	≥65 dB	≥35 dB	
Compatibility:	Telcordia GR-326-CORE									
Compliance:	IEC 61754-13		IEC 61754-2	IEC 61754-4			IEC 61754-20			
	Regulation (EC) No 1907/2006 (REACH); Directive 2011/65/EU Am. 2015/863/EU (RoHS2); UL 94 V-0									

\*When polished following industry's best practices.

Termination Tools	P97
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Splice-on Plugs

Cable OD	2–3 mm		0.9 mm	
Plug type	SM UPC	SM APC	SM UPC	SM APC
SC	263-OSP03-10Zxx	263-OSP03-10Yxx		
LC	263-OSP04-1FZxx	263-OSP04-1FYxx	263-OSP04-1BZxx	263-OSP04-1BYxx
Substitute "x" in PN with: "01": 1-pack; "06": 6-pack; "12": 12-pack; "24": 24-pack; "48": 48-pack; "96": 96-pack.				

Termination Tools P97

CHARACTERISTICS

	SM UPC	SM APC	SM UPC	SM APC
	263-OSP03-10Z	263-OSP03-10Y	263-OSP04-1BZ	263-OSP04-1BY
	263-OSP04-1FZ	263-OSP04-1FY		
Cable types:	2–3 mm OD tight-buffer round cables		900-µm buffered fiber	
End-face polish:	Factory pre-polished			
Fiber retention mechanism:	"V" groove			
Material:	Polyetherimide (PEI)			
Termination time:	~15 s (excluding fiber preparation)			
Termination yield:	>98 %			
Tools:	Fiber stripper, fiber cleaver, cleaning wipes, VFL (optional)			
IL:	≤0.2 dB typical	≤0.25 dB typical	≤0.2 dB typical	≤0.25 dB typical
RL:	≥50 dB	≥60 dB	≥50 dB	≥60 dB
Mechanical durability:	>1000 mating cycles			
Reusability:	>10 times			
Tensile strength:	>5 N (1.1 lbf)			
Buffer retention strength:	>10 N (2.3 lbf)			
In-line tensile strength test:	IL ≤0.3 dB at 20 N (4.5 lbf)			
Durability test:	IL ≤0.3 dB after 500 mating cycles			
Drop test:	IL ≤0.3 dB (drop height: 4 m (13 ft), concrete floor, three times)			
Storage temperature:	-45 °C–+85 °C (-49 °F–+185 °F)			
Operating temperature:	-40 °C–+75 °C (-40 °F–+167 °F)			
Operating humidity:	≤95 % RH non-condensing			
Compliance:	Telcordia GR-326-CORE			

Splice Trays/Cassettes

265-CAS01-1B2xy

Optical fiber splice tray/cassette, compact, stackable, 24-fiber, black

Substitute "x" in PN with:

- "O": no sleeves;
- "A": 2 sleeves;
- "B": 4 sleeves;
- "C": 6 sleeves;
- "D": 8 sleeves;
- "E": 12 sleeves;
- "F": 24 sleeves.

Substitute "y" in PN with:

- "O": no sleeves;
- "A": 40-mm sleeves.



265-CAS01-1B2 splice tray/cassette is supplied with two splice holders and custom number of 40-mm 265-SLV01-3A splice sleeves.

PN example: 265-CAS01-1B2EA Optical fiber splice tray/cassette, compact, stackable, 24-fiber, black, twelve 40-mm sleeves.

265-CAS01-2B2xy

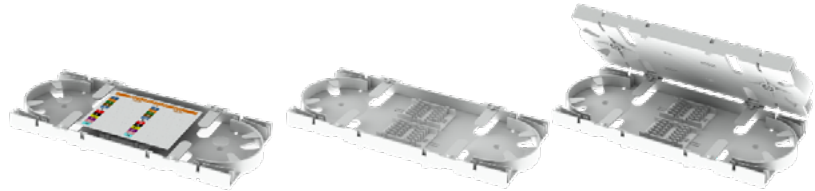
Optical fiber splice tray/cassette, standard, stackable, 24-fiber, transparent cover, black

Substitute "x" in PN with:

- "O": no sleeves;
- "A": 2 sleeves;
- "B": 4 sleeves;
- "C": 6 sleeves;
- "D": 8 sleeves;
- "E": 12 sleeves;
- "F": 24 sleeves.

Substitute "y" in PN with:

- "O": no sleeves;
- "A": 40-mm sleeves;
- "B": 60-mm sleeves.



265-CAS01-2B2 splice tray/cassette is supplied with two splice holders and custom number of 40-mm 265-SLV01-3A or 60-mm 265-SLV01-3B splice sleeves.

PN example:

265-CAS01-2B2FB

Optical fiber splice tray/cassette standard stackable, transparent cover, white, twenty-four 60-mm sleeves.

CHARACTERISTICS

Compatible splicing: fusion splice, heat-shrink protection sleeves.

Capacity: 265-CAS01-1B2: 24 fibers (24 265-CAS01-1B2 sleeves);  
265-CAS01-2B2: 24 fibers (24 265-CAS01-1B2 or 265-CAS01-2B2 sleeves).

Features: 265-CAS01-1B2: two splice holders; fiber-management and slack storage mechanism; cable anchoring points; vertically stackable.  
265-CAS01-2B2: two splice holders; fiber-management and slack storage mechanism; cable anchoring points; vertically stackable; transparent cover; administration ID label.

Materials: body: ABS (acrylonitrile butadiene styrene); splice holder: PP (polypropylene).

Environmental: operating temperature: -20 °C--+70 °C (-4 °F--+158 °F); operating humidity: ≤95 % RH non-condensing.

Dimensions: 265-CAS01-1B2: 140 mm × 100 mm × 12 mm (5.5 in × 4.0 in × 0.5 in); 265-CAS01-2B2: 225 mm × 105 mm × 12 mm (8.9 in × 4.1 in × 0.5 in).

Weight: 265-CAS01-1B2: 70 g (2.5 oz); 265-CAS01-2B2: 50 g (1.8 oz)

Compliance: Telcordia GR-771-CORE; RoHS.

Compatibility: 265-CAS01-1B2: Vertical Cable 267-RES, 267-REB, 268-STD, 268-EZX, 268-EZV Series  
265-CAS01-2B2: Vertical Cable 267-RES, 267-REB Series



Splice Sleeves

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## Array Splice Cassette



265-CAS10-1xyz Array Splice Cassette, 6-position

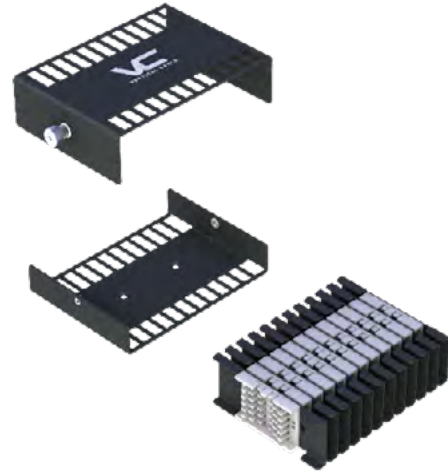
Substitute "x" in PN with:	Substitute "y" in PN with:	Substitute "z" in PN with:
"A": 1 cartridge;	"O": no sleeves;	"O": no sleeves;
"B": 2 cartridges;	"4": 40-mm sleeves;	"A": non-stacked sleeves;
"C": 3 cartridges;	"6": 60-mm sleeves.	"B": stacked sleeves.
"D": 4 cartridges;		
"E": 5 cartridges;		
"F": 6 cartridges.		



265-CAS10-2 – ASSEMBLED

265-CAS10-2xyz Array Splice Cassette, 12-position

Substitute "x" in PN with:	Substitute "y" in PN with:	Substitute "z" in PN with:
"A": 1 cartridge;	"O": no sleeves;	"O": no sleeves;
"B": 2 cartridges;	"4": 40-mm sleeves;	"A": non-stacked sleeves;
"C": 3 cartridges;	"6": 60-mm sleeves.	"B": stacked sleeves.
"D": 4 cartridges;		
"E": 5 cartridges;		
"F": 6 cartridges;		
"G": 7 cartridges;		
"H": 8 cartridges;		
"I": 9 cartridges;		
"J": 10 cartridges;		
"K": 11 cartridges;		
"L": 12 cartridges.		

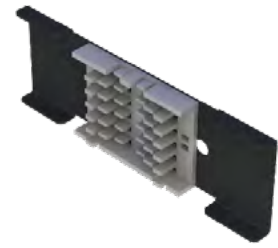


265-CAS10-2 – EXPLODED VIEW

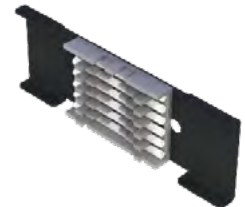
Splice Sleeves	P88	AVAILABLE Q1 2022
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### CHARACTERISTICS

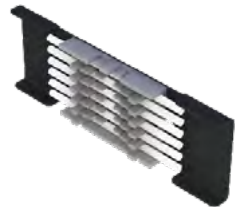
Compatible splicing:	fusion splice, heat-shrink protection sleeves.	
Capacity:	265-CAS10-1:	6cartridges; 36 sleeves/fibers, non-stacked; 72 sleeves/fibers, stacked;
	265-CAS10-2:	12cartridges; 72sleeves/fibers, non-stacked; 144sleeves/fibers, stacked.
Materials:	base and cover:	
	body:	aluminum alloy;
	finish:	black powder coating;
	splice holder:	PP (polypropylene);
	protection sleeves:	
	size:	2.5 mm (0.1 in);
	length:	40 mm (1.6 in);
	60 mm (2.4 in);	
	external tubing:	PAO (polyolefin);
	internal tubing:	EVA (ethylene-vinyl acetate);
	rod:	stainless steel.
Sleeve shrinking t°:	≥100 °C (212 °F).	
Environmental:	operating temperature: -20 °C – +70 °C (-4 °F – +158 °F); operating humidity: ≤95 % RH non-condensing.	
Dimensions:	265-CAS10-1:	63 mm × 100 mm × 32 mm (2.5 in × 3.9 in × 1.25 in);
	265-CAS10-2:	117 mm × 100 mm × 32 mm (4.6 in × 3.9 in × 1.25 in).
Weight:	265-CAS10-1 (full capacity, 6 cartridges, 72 60-mm sleeves): 180 g (6.4 oz); 265-CAS10-2 (full capacity, 12 cartridges, 144 60-mm sleeves): 310 g (11 oz).	
Compliance:	Telcordia GR-771-CORE; ANSI/UL 94 V-2; RoHS.	
Compatibility:	267-RES, 267-REB, 268-STD, 268-EZX, 268-EZV Series	



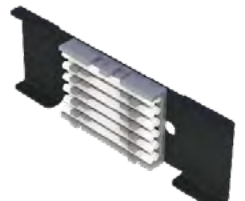
265-CAS10 CARTRIDGE – WITHOUT SLEEVES



265-CAS10 CARTRIDGE  
40-MM SLEEVES NON-  
STACKED



265-CAS10 CARTRIDGE  
60-MM SLEEVES NON-  
STACKED



265-CAS10 CARTRIDGE  
40-MM SLEEVES STACKED



265-CAS10 CARTRIDGE  
60-MM SLEEVES STACKED

# COMPONENTS AND ACCESSORIES ▶ Splicing

## Splice Holders

265-HLD01-2B-xy

Optical fiber splice holder, adhesive mounting, two fibers per slot, six slots, twelve fibers

Substitute "-x" in PN with:

Substitute "y" in PN with:

- "O": no sleeves;
- "A": 2 sleeves;
- "B": 4 sleeves;
- "C": 6 sleeves;
- "D": 8 sleeves;
- "E": 12 sleeves.

- "O": no sleeves;
- "A": 40-mm sleeves;
- "B": 60-mm sleeves.



PN example:

265-HLD01-2B-00 Optical fiber splice holder, adhesive mounting, no sleeves.

PN example:

265-HLD01-2B-EB Optical fiber splice holder, adhesive mounting, twelve 60-mm sleeves.

### CHARACTERISTICS

- Compatible splicing: fusion splice, heat-shrink protection sleeves.
- Capacity: 6 slots × 2 fibers/slot = 12 fibers.
- Material: polypropylene (PP).
- Color: black.
- Mounting type: adhesive pad.
- Environmental: operating temperature: -20 °C--70 °C (-4 °F--158 °F); operating humidity: ≤95 % RH non-condensing.
- Dimensions: 40 mm × 30 mm × 7 mm (1.6 in × 1.2 in × 0.3 in).
- Weight: 3 g (0.1 oz)
- Compliance: ANSI/UL 94 V-2.



Splice Sleeves

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## Splice Protection Sleeves

265-SLV01-3A-x

Optical fiber splice protection sleeve, 2.5 mm × 40 mm, pack of "x"

265-SLV01-3B-x

Optical fiber splice protection sleeve, 2.5 mm × 60 mm, pack of "x"



Substitute "-x" in PN with:

- "E": 12 sleeves;
- "F": 24 sleeves;
- "G": 48 sleeves;
- "H": 96 sleeves.

### CHARACTERISTICS

- Diameter:
  - external tubing: 2.5±0.3 mm (0.1±0.01 in) after shrinking;
  - internal tubing: 1.3±0.1 mm (0.05±0.01 in);
  - rod: 1.2±0.05 mm (0.05±0.002 in).
- Length:
  - 265-SLV01-3A: overall: 40±2 mm (1.6±0.08 in); rod: 34±2 mm (1.3±0.08 in);
  - 265-SLV01-3B: overall: 60±2 mm (2.4±0.08 in); rod: 54±2 mm (2.1±0.08 in).
- Weight:
  - 265-SLV01-3A: 0.5 g (0.02 oz);
  - 265-SLV01-3B: 0.7 g (0.03 oz).
- Materials:
  - external tubing: polyolefin (PAO);
  - internal tubing: ethylene-vinyl acetate (EVA);
  - rod: stainless steel.
- Shrinking temperature: ≥100 °C (212 °F).

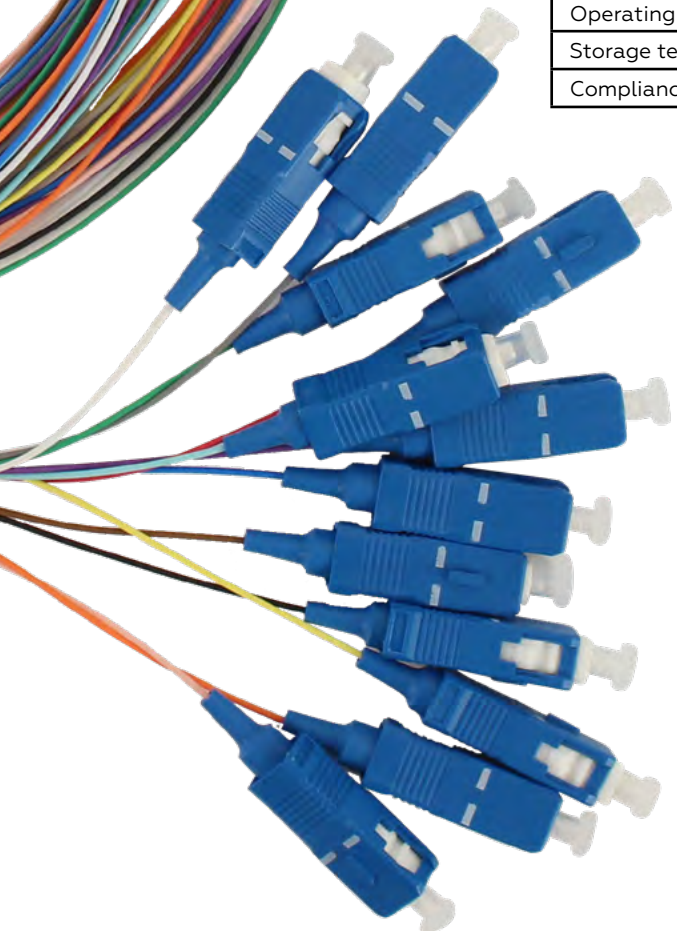
Mechanical Splices

P88

Splice Trays/Cassettes

P84

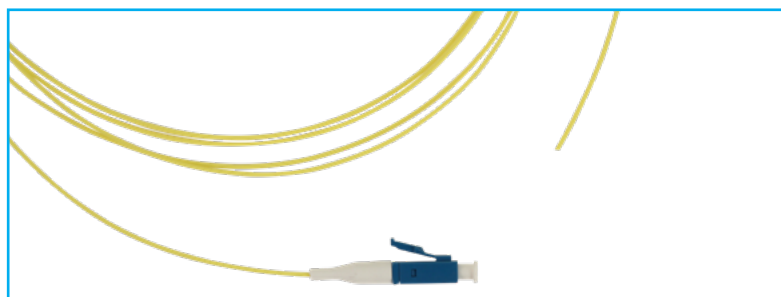
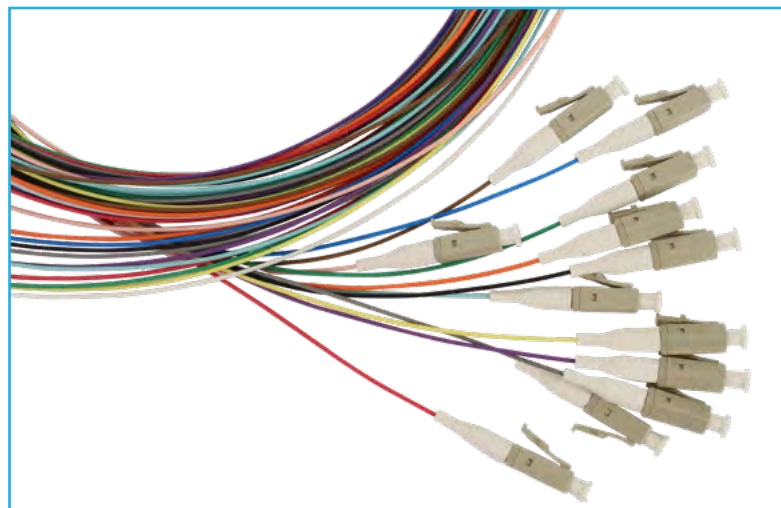
# COMPONENTS AND ACCESSORIES ▶ Splicing ▶ Pigtails



		SM UPC	OM3	OM4
		2 m	2 m	2 m
1-fiber	SC	265-OFPO3-1AUM2		
	LC	265-OFPO4-1AUM2	265-OFPO4-1A3M2	265-OFPO4-1A4M2
12-fiber	SC	265-OFPO3-1LUM2		
	LC	265-OFPO4-1LUM2	265-OFPO4-1L3M2	265-OFPO4-1L4M2

## CHARACTERISTICS

	SM UPC	OM3	OM4
Fiber classes:	G.652.D OS2	OM3	OM4
Fiber types:	9/125 μm	50/125 μm	
Fiber length:	2 m ± 50 mm (6.6 ft ± 2 in)		
Plug ferrule:	Ceramic		
Plug polish type:	UPC		
Plug body/boot color:	Blue	Gray	Gray
Buffer size:	900 μm		
Buffer material:	PVC (polyvinylchloride)		
Buffer color:	1-fiber: white, 12-fiber: ANSI/TIA-598		
Insertion loss:	≤ 0.3 dB		
Insertion loss repeatability:	≤ 0.2 dB after 1000 mating cycles		
Return loss:	≥ 50 dB	≥ 30 dB	
Operating temperature:	-25 °C – +75 °C (-13 °F – +167 °F)		
Operating humidity:	≤ 95 % non-condensing		
Storage temperature:	-45 °C – +85 °C (-49 °F – +185 °F)		
Compliance:	ANSI/TIA-568.3-D		



OPTICAL FIBER SYSTEMS

**Mechanical Splices**

265-MEC01-x Optical fiber mechanical splice, universal, 0.25 and 0.9 mm, pack of "x"

Substitute "x" in PN with:

- "A": 2 splices;
- "B": 4 splices;
- "C": 6 splices;
- "D": 8 splices;
- "E": 12 splices;
- "F": 24 splices.

**CHARACTERISTICS**

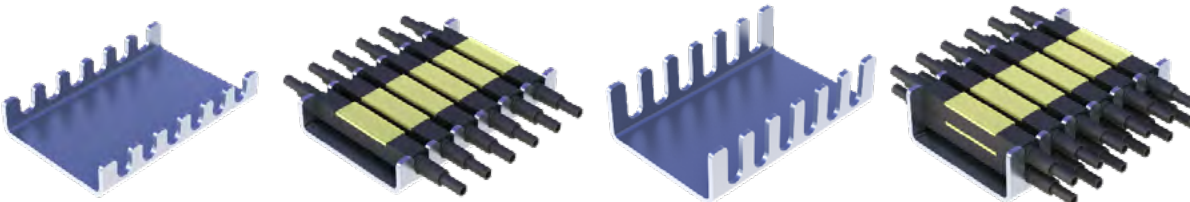
Compatible splicing:	mechanical splice.
Capacity:	single fiber.
Fiber coating size:	250 μm–900 μm.
Insertion Loss:	maximum: 0.3 dB; typical: 0.1 dB.
Return Loss:	≥45 dB.
Tensile strength:	≤4 N (0.9 lbf).
Installation time:	~30 s.
Storage temperature:	-45 °C–+85 °C (-49 °F–+185 °F).
Operating temperature:	-40 °C–+70 °C (-40 °F–+158 °F).
Operating humidity:	≤95 % RH non-condensing.
Dimensions:	5 mm × 7 mm × 38 mm 0.2 in × 0.3 in × 1.5 in
Compliance:	ANSI/TIA-568.3-D.



OPTICAL FIBER SYSTEMS

**Mechanical Splice Holders**

265-HLD11-1A4-x Optical fiber mechanical splice holder, non-stackable (1 splice/slot), adhesive mounting, 6-fiber  
 265-HLD11-2B4-x Optical fiber mechanical splice holder, stackable (two splices/slot), adhesive mounting, 12-fiber



**265-HLD11-1A4-x**

**265-HLD11-2B4**

Substitute "-x" in PN with:  
 "O": no splices;  
 "A": 2 splices;  
 "B": 4 splices;  
 "C": 6 splices;  
 "D": 8 splices  
 (265-HLD11-2B4 only);  
 "E": 12 splices  
 (265-HLD11-2B4 only).

**CHARACTERISTICS**

Compatible splice:	VC 265-MEC01 mechanical splice.
Mounting type:	adhesive pad.
Capacity:	265-HLD11-1A4: 6 slots × 1 splice/slot = 6 splices 265-HLD11-2B4: 6 slots × 2 splices/slot = 12 splices.
Dimensions:	265-HLD11-1A4: 26 mm × 40 mm × 7 mm (1.0 in × 1.6 in × 0.3 in); 265-HLD11-2B4: 26 mm × 40 mm × 11 mm (1.0 in × 1.6 in × 0.4 in);
Weight:	265-HLD11-1A4: 3.5 g (0.12 oz) without splices; 265-HLD11-2B4: 3.9 g (0.14 oz) without splices.
Material:	aluminum alloy 5052-H32 or equivalent.
Finish, color:	black powder coating.
Storage temperature:	-45 °C–+85 °C (-49 °F–+185 °F).
Operating temperature:	-40 °C–+70 °C (-40 °F–+158 °F).
Operating humidity:	≤95 % RH non-condensing.

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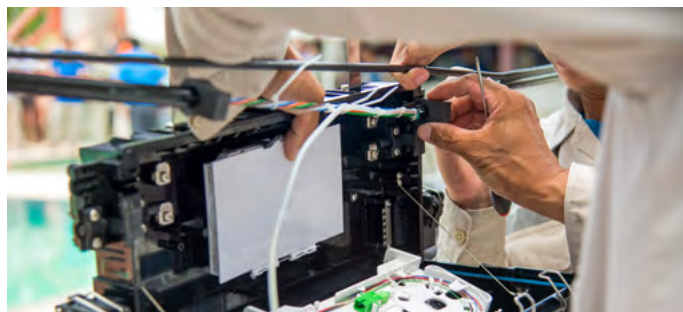


OSP Splice Closures

	265-OSC00-09606	265-OSC00-09608	265-OSC00-24006
Horizontal, In-line			
Fiber capacity	96	96	240
Cable entry ports	6	8	6
Splice cassettes	8 × 12F	8 × 12F	20 × 12F
Cable diameter range	8 mm–23 mm (0.32 in–0.91 in)		
Dimensions	450 mm × 220 mm × 110 mm (17.7 in × 8.7 in × 4.3 in)		450 mm × 220 mm × 160 mm (17.7 in × 8.7 in × 6.3 in)
Weight*	2.75 kg–3.2 kg (6.1 lb–7.1 lb)		3.1 kg–3.8 kg (6.8 lb–8.4 lb)
Material	High-impact fiber-reinforced PC		
Environmental protection	IP68		
Radiation protection	UV resistant		
Operating temperature	-40 °C–+65 °C (-40 °F–+149 °F)		

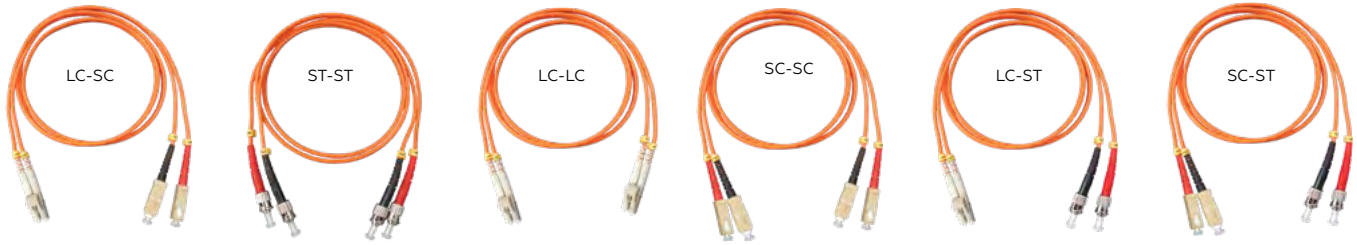
	265-OSC10-09602	265-OSC10-04804	265-OSC10-28806
Vertical, Dome			
Fiber capacity	96	48	288
Cable entry ports	2	4	6
Splice cassettes	8 × 12F	4 × 12F	24 × 12F
Cable diameter range	7 mm–14 mm (0.28 in–0.55 in)	8 mm–16 mm (0.32 in–0.63 in)	8 mm–21 mm (0.32 in–0.83 in)
Dimensions	280 mm × 200 mm × 90 mm (11.0 in × 7.9 in × 3.5 in)	290 mm × 180 mm (11.4 in × 7.1 in)	455 mm × 220 mm (17.9 in × 8.7 in)
Weight*	1.2 kg–1.5 kg (2.7 lb–3.3 lb)	1.8 kg–1.9 kg (4.0 lb–4.2 lb)	3.3 kg–4.2 kg (7.3 lb–9.3 lb)
Material	High-impact fiber-reinforced PC		
Environmental protection	IP68		
Radiation protection	UV resistant		
Operating temperature	-40 °C–+65 °C (-40 °F–+149 °F)		

\* Weight range is given depending on the number of splice cassettes installed, none to maximum.



# CABLE ASSEMBLIES

## OM1 Multimode Duplex PC Polish

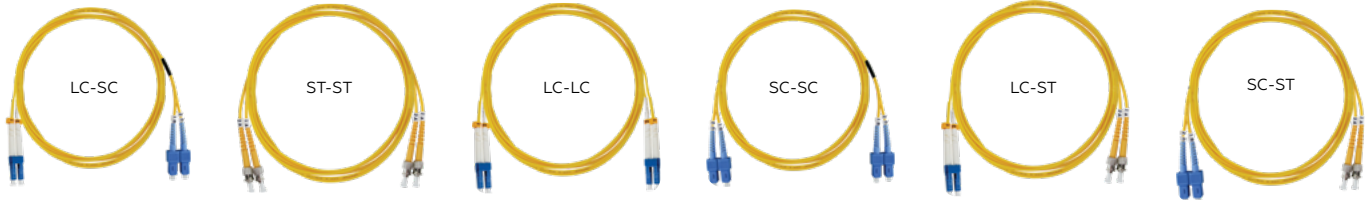


Size	ST-ST	LC-ST	LC-SC	SC-SC	SC-ST	LC-LC
1 m	261-STST/1MM	261-LCST/1MM	261-LCSC/1MM	261-SCSC/1MM	261-SCST/1MM	261-LCLC/1MM
2 m	261-STST/2MM	261-LCST/2MM	261-LCSC/2MM	261-SCSC/2MM	261-SCST/2MM	261-LCLC/2MM
3 m	261-STST/3MM	261-LCST/3MM	261-LCSC/3MM	261-SCSC/3MM	261-SCST/3MM	261-LCLC/3MM
5 m	261-STST/5MM	261-LCST/5MM	261-LCSC/5MM	261-SCSC/5MM	261-SCST/5MM	261-LCLC/5MM
7 m	261-STST/7MM	261-LCST/7MM	261-LCSC/7MM	261-SCSC/7MM	261-SCST/7MM	261-LCLC/7MM
10 m	261-STST/10MM	261-LCST/10MM	261-LCSC/10MM	261-SCSC/10MM	261-SCST/10MM	261-LCLC/10MM
15 m	261-STST/15MM	261-LCST/15MM	261-LCSC/15MM	261-SCSC/15MM	261-SCST/15MM	261-LCLC/15MM



**Features:** Multimode duplex fiber optic patch cord | 62.5/125  $\mu$ m | PC polish | 3.0 mm diameter | Ceramic ferrule

## Singlemode Duplex UPC Polish



Size	ST-ST	LC-ST	LC-SC	SC-SC	SC-ST	LC-LC
1 m	261-STST/1SM	261-LCST/1SM	261-LCSC/1SM	261-SCSC/1SM	261-SCST/1SM	261-LCLC/1SM
2 m	261-STST/2SM	261-LCST/2SM	261-LCSC/2SM	261-SCSC/2SM	261-SCST/2SM	261-LCLC/2SM
3 m	261-STST/3SM	261-LCST/3SM	261-LCSC/3SM	261-SCSC/3SM	261-SCST/3SM	261-LCLC/3SM
5 m	261-STST/5SM	261-LCST/5SM	261-LCSC/5SM	261-SCSC/5SM	261-SCST/5SM	261-LCLC/5SM
7 m	261-STST/7SM	261-LCST/7SM	261-LCSC/7SM	261-SCSC/7SM	261-SCST/7SM	261-LCLC/7SM
10 m	261-STST/10SM	261-LCST/10SM	261-LCSC/10SM	261-SCSC/10SM	261-SCST/10SM	261-LCLC/10SM
15 m	261-STST/15SM	261-LCST/15SM	261-LCSC/15SM	261-SCSC/15SM	261-SCST/15SM	261-LCLC/15SM



**Features:** Singlemode duplex fiber optic patch cord | 9/125  $\mu$ m | UPC polish | 3.0 mm diameter | Ceramic ferrule

## OM3 Multimode Duplex PC Polish



Size	ST-ST	LC-ST	LC-SC	SC-SC	SC-ST	LC-LC
1 m	263-STST/1MM	263-LCST/1MM	263-LCSC/1MM	263-SCSC/1MM	263-SCST/1MM	263-LCLC/1MM
2 m	263-STST/2MM	263-LCST/2MM	263-LCSC/2MM	263-SCSC/2MM	263-SCST/2MM	263-LCLC/2MM
3 m	263-STST/3MM	263-LCST/3MM	263-LCSC/3MM	263-SCSC/3MM	263-SCST/3MM	263-LCLC/3MM
5 m	263-STST/5MM	263-LCST/5MM	263-LCSC/5MM	263-SCSC/5MM	263-SCST/5MM	263-LCLC/5MM
7 m	263-STST/7MM	263-LCST/7MM	263-LCSC/7MM	263-SCSC/7MM	263-SCST/7MM	263-LCLC/7MM
10 m	263-STST/10MM	263-LCST/10MM	263-LCSC/10MM	263-SCSC/10MM	263-SCST/10MM	263-LCLC/10MM
15 m	263-STST/15MM	263-LCST/15MM	263-LCSC/15MM	263-SCSC/15MM	263-SCST/15MM	263-LCLC/15MM



**Features:** Multimode duplex fiber optic patch cord | 50/125  $\mu$ m | PC polish | 2.0 mm diameter | Ceramic ferrule

# CABLE ASSEMBLIES ▶ Patch Cords

## 2-mm Patch Cords

1 M	ST-ST	SC-SC	SC-ST	LC-LC	LC-SC	LC-ST
OM1	261-PC1C44A001M		261-PC1C64A001M	261-PC1C88A001M		261-PC1C84A001M
OM3		261-PC3C66A001M		261-PC3C88A001M		
OM4				261-PC4C88A001M		
SM UPC	261-PCUC44A001M	261-PCUC66A001M	261-PCUC64A001M	261-PCUC88A001M	261-PCUC86A001M	261-PCUC84A001M

2 M	ST-ST	SC-SC	SC-ST	LC-LC	LC-SC	LC-ST
OM1	261-PC1C44A002M		261-PC1C64A002M	261-PC1C88A002M		261-PC1C84A002M
OM3		261-PC3C66A002M		261-PC3C88A002M		
OM4				261-PC4C88A002M		
SM UPC	261-PCUC44A002M	261-PCUC66A002M	261-PCUC64A002M	261-PCUC88A002M	261-PCUC86A002M	261-PCUC84A002M

3 M	ST-ST	SC-SC	SC-ST	LC-LC	LC-SC	LC-ST
OM1	261-PC1C44A003M		261-PC1C64A003M	261-PC1C88A003M		261-PC1C84A003M
OM3		261-PC3C66A003M		261-PC3C88A003M		
OM4				261-PC4C88A003M		
SM UPC	261-PCUC44A003M	261-PCUC66A003M	261-PCUC64A003M	261-PCUC88A003M	261-PCUC86A003M	261-PCUC84A003M

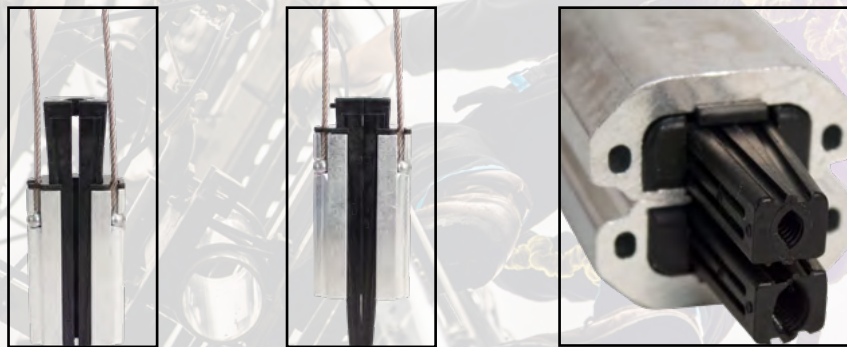
  

5 M	ST-ST	SC-SC	SC-ST	LC-LC	LC-SC	LC-ST
SM UPC	261-PCUC44A005M	261-PCUC66A005M	261-PCUC64A005M	261-PCUC88A005M	261-PCUC86A005M	261-PCUC84A005M

### CHARACTERISTICS

	SM UPC	OM1	OM3	OM4
Fiber class:	G.652.D OS2	OM1	OM3	OM4
Fiber type:	9/125 μm	62.5/125 μm	50/125 μm	
Ferrule material:	Ceramic			
Plug body/boot color:	Blue	Beige	Aqua	Heather Violet
Jacket diameter:	2 mm			
Jacket length:	±50 mm (±2 in)			
Jacket material:	(PVC) polyvinylchloride			
Jacket color:	Yellow	Orange	Aqua	
Insertion loss:	≤0.3 dB			
Insertion loss repeatability:	≤0.2 dB after 1000 mating cycles			
Return loss:	≥50 dB	≥30 dB		
Operating temperature:	-25 °C–+75 °C (-13 °F–+167 °F)			
Operating humidity:	≤95 % RH non-condensing			
Storage temperature:	-45 °C–+85 °C (-49 °F–+185 °F)			
Compliance:	ANSI/TIA-568.3-D			

OSP Anchor Clamps	<b>269-OPH00-01110</b>	<b>269-OPH00-011415</b>
Cable construction:	Round ADSS	
Cable OD diameter:	8 mm–11 mm (0.3 in–0.4 in)	11 mm–14 mm (0.4 in–0.6 in)
Load capacity:	≤10 kN (~2,250 lbf)	≤15 kN (~3,370 lbf)
Cable retention mechanism:	Tension, self-adjusting plastic wedges	
Housing material:	Aluminum alloy	
Bail material:	Stainless steel	
Operating temperature:	-40 °C–+70 °C (-40 °F–+158 °F)	
Mounting:	Wall or pole using clamp anchor points (brackets)	
Applications:	Dead-end support/drop, suspension support	





OPTICAL FIBER SYSTEMS

OSP Suspension Clamps	<b>269-OPH01-01204</b>	<b>269-OPH01-01504</b>	<b>269-OPH01-02004</b>	<b>269-OPH01-80802</b>	<b>269-OPH01-D0P3</b>
Cable construction:	Round ADSS, self-supporting, or drop			Messenger ("8 in)	Round drop
Cable/messenger OD diameter:	8 mm–12 mm (0.3 in–0.5 in)	10 mm–15 mm (0.4 in–0.6 in)	15 mm–20 mm (0.6 in–0.8 in)	4 mm–8 mm (0.16 in–0.4 in)	2 mm–8 mm (0.08 in–0.4 in)
Load capacity:	4 kN (~900 lbf)			2 kN (~450 lbf)	0.3 kN (~70 lbf)
Span, max:	100 m (~330 ft)				70 m (230 ft)
Line/span angle, max:	25 °			20 °	20 °
Cable retention mechanism:	Rubber gripping insert, screw-adjustable compression			Screw-adjustable compression	Compression
Housing material:	Galvanized steel				Nylon, UV resistant
Insert material:	Neoprene			–	Elastomer
Operating temperature:	-40 °C–+70 °C (-40 °F–+158 °F)				
Mounting:	Wall or pole using clamp anchor points (brackets)				
Applications:	Horizontal support			Support for cables with a messenger	Support for FTTH drop cables

# INSTALLATION, TESTING, MAINTENANCE ▶ Installation Accessories

OSP Tension Clamps	<b>269-OPH02-80702</b>	<b>269-OPH02-80902</b>	<b>269-OPH02-D10P7</b>	<b>269-OPH02-D11P2</b>
				
Cable construction:	Self-supporting drop "8 in, fiber-reinforced plastic (FRP) or aramid yarn messenger		FTTH drop	
Cable/messenger OD diameter:	3 mm–7 mm (0.12 in–0.3 in)	6 mm–9 mm (0.25 in–0.35 in)	3 mm–5 mm (0.12 in–0.2 in)	3 mm–7 mm (0.12 in–0.3 in)
Load capacity:	2 kN (~450 lbf)		0.7 kN (~160 lbf)	1.2 kN (~270 lbf)
Cable retention mechanism:	Tension, self-adjusting wedges		Tension, wedge, and perforated shim	
Material:	Fiberglass-reinforced plastic		Stainless steel Type 201	
Length:	–	–	150 mm (8.7 in)	220 mm (8.7 in)
Bail material:	Stainless steel			
Bail length:	230 mm (9 in)			
Operating temperature:	-60 °C–+60 °C (-76 °F–+140 °F)			
Mounting:	Wall or pole using clamp anchor points (brackets)			
Applications:	Dead-end support/drop			

OSP Brackets	<b>269-OPH10-0115</b>	<b>269-OPH10-0304</b>
		
Load capacity:	15 kN (~3,370 lbf)	5 kN (~1,120 lbf)
Material:	Aluminum alloy	
Dimensions:	116 mm × 35 mm × 20 mm (4.6 in × 1.4 in × 0.8 in)	120 mm × 100 mm × 50 mm (4.7 in × 4 in × 2 in)
Mounting:	Wood, concrete, metal poles Steel bands or bolts	
Applications:	Anchor point for clamps (single/double)	Anchor point for clamps Horizontal support: up to 3 clamps Drop: up to 5 clamps

OSP Hooks	<b>269-OPH30-011P5</b>
	
Load capacity:	1.5 kN (~340 lbf)
Material:	Galvanized steel
Dimensions:	65 mm × 65 mm × 55 mm (4.6 in × 1.4 in × 0.8 in)
Mounting:	Wood, concrete, metal poles Steel bands or screws
Applications:	Anchor point for clamps

## OSP Steel Banding

269-OPH20-42050      OSP Stainless Steel Banding Strap Roll

### CHARACTERISTICS

- Material: stainless steel, Type 304.
- Breaking point: 10 kN (2,250 lbf).
- Dimensions: width: 19 mm (0.75 in);  
thickness: 0.76 mm (0.03 in);  
length: 50 m (~164 ft).
- Operating temperature: -60 °C–+60 °C (-76 °F–+140 °F).
- Packing: plastic dispenser with handle



269-OPH21-420L      OSP Stainless Steel Banding Strap Buckle L-type

### CHARACTERISTICS

- Material: stainless steel, Type 304.
- Compatibility: SS band 19 mm × 0.76 mm (0.75 in × 0.03 in).

269-OPH21-420T      OSP Stainless Steel Banding Strap Buckle T-type

### CHARACTERISTICS

- Material: stainless steel, Type 304.
- Compatibility: SS band 19 mm × 0.76 mm (0.75 in × 0.03 in).



OPTICAL FIBER SYSTEMS



- **Sturdy dispenser with handle**
- **Stainless steel**
- **Strong lock**

# INSTALLATION, TESTING, MAINTENANCE ▶ Installation Accessories

269-OPH22-0120 OSP Steel Banding Tool Rotary Type

## CHARACTERISTICS

- Features: built-in cutter to trim the banding; spring-loaded gripper lever.
- Materials: drop-forged steel, epoxy powder coating.
- Compatibility: SS band 19 mm × 0.76 mm (0.75 in × 0.03 in).
- Pulling tension: >10.7 kN (2,400 lbf).
- Dimensions: length: 250 mm (10 in); height: 80 mm (3 in); width: 100 mm (4 in).
- Weight: 2 kg (4.4 lb).



269-OPH22-0220 OSP Steel Banding Tool Jack Type

## CHARACTERISTICS

- Features: built-in cutter to trim the banding; ratcheted gripper mechanism.
- Materials: drop-forged steel, epoxy powder coating.
- Compatibility: SS band 19 mm × 0.76 mm (0.75 in × 0.03 in).
- Pulling tension: >10.7 kN (2,400 lbf).
- Dimensions: length: 235 mm (9.3 in); height: 80 mm (3 in); width: 100 mm (4 in).
- Weight: 1.8 kg (4 lb).



# INSTALLATION, TESTING, MAINTENANCE ▶ Installation Accessories

## Break-out Kits

- 269-BOK12-20312 Optical Fiber Cable Break-out Kit, 12-Fiber
- 269-BOK24-20312 Optical Fiber Cable Break-out Kit, 24-Fiber

## CHARACTERISTICS

	269-BOK12-20312	269-BOK24-20312
Fiber count:	12	24
Cable diameter:	5.8 mm (0.23 in)	8.4 mm (0.33 in)
Cable structure:	Single-jacket tight-buffer round	
Fiber buffer diameter:	900 μm	
Tube diameter:	2 mm (0.08 in)	
Material:	Polyoxymethylene (POM)	
Dimensions:	14 mm × 45 mm (0.55 in × 1.77 in)	18 mm × 48 mm (0.71 in × 1.89 in)



**Cable and Fiber Preparation Tool Kit**

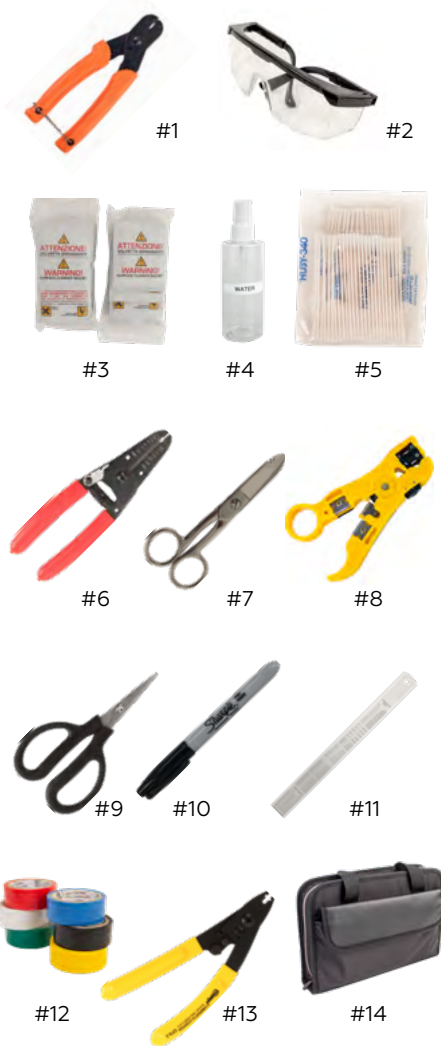
269-PRE01      Optical Fiber Preparation Tool Kit - Basic



OPTICAL FIBER SYSTEMS

Contents:

No.	Item	Quantity	PN for reordering*
1	Cable cutter, round	1	078-1024
2	Safety goggles	1	269-PAC01-0001
3	Pre-moistened wipes, IPA, 1 pack	5	269-PAC03-0004
4	Cleaning agent dispensing bottle, 100 ml (3.4 fl oz)**	1	269-PAC03-0007
5	Cleaning cotton swabs, tipped, 2.5 mm, 25-pack	1	269-PAC03-0008
6	Optical fiber cable jacket stripper (dia. 0.8 mm–2.6 mm)	1	269-PAC05-006***
7	Electrician scissors, 5-½ in	1	269-PAC04-0003
8	Cable jacket cutting and slitting tool, dia. 1.2 mm–6.4 mm	1	078-1022
9	Kevlar scissors	1	269-PAC04-0005
10	Permanent marker, fine-point, black	1	269-PAC05-0002
11	Ruler, SI/USCU, 12-in, stainless steel	1	269-PAC05-0003
12	Electrical tape, multicolor, six rolls, 18 mm x 2 m (0.7 in x 6.6 ft)	1	269-PAC05-0004
13	Optical fiber stripper (dia. 0.25 mm–3 mm)	1	269-PAC05-0006
14	Portable carrying soft-case bag		-



\* Re-ordered products may not be identical to those in the original kit but would have the same functional properties.  
 \*\* Spray bottle is supplied empty due to shipping safety restrictions.  
 \*\*\* No direct replacement of Optical fiber cable jacket stripper is available for reordering. Offered replacement is similar, but not 100% equivalent.



## Termination Tool Kit

269-TRM01 Optical Fiber Termination Tool Kit – Anaerobic Epoxy



No.	Item	Quantity	PN for reordering*
1	Cable cutter, round	1	078-1024
2	Safety goggles	1	269-PAC01-0001
3	Storage container, five-compartment, 90 mm x 180 mm (3-½ in x 7 in), plastic, 2-pack	1	269-PAC02-0003
4	Pre-moistened wipes, IPA, 1 pack	10	269-PAC03-0004
5	Cleaning agent dispensing bottle, 100 ml (3.4 fl oz)**	1	269-PAC03-0007
6	Water dispensing bottle, 100 ml (3.4 fl oz)	1	269-PAC03-0007
7	Cleaning cotton swabs, tipped, 2.5 mm, 25-pack	1	269-PAC03-0008
8	Electrician's scissors	1	269-PAC04-0003
9	Kevlar shears, ceramic	1	269-PAC04-0005
10	Permanent marker, fine-point, black	1	269-PAC05-0002
11	Ruler, SI/USCU, 6- or 12-in, stainless steel	1	269-PAC05-0003
12	Electrical tape, multicolor, six rolls, 18 mm x 2 m (0.7 in x 6.6 ft)	1	269-PAC05-0004
13	Plastic container, fiber scrap collector, dia. 70 mm (2-¾ in), locking screw lid	1	269-PAC05-0005
14	Optical fiber stripper, 3-step (2 mm–3 mm/0.9 mm/0.25 mm)	1	269-PAC05-0006
15	Carbide scribe tool, straight tip	1	269-PAC06-0001
16	Optical fiber connector polishing disk, 2.5-mm	1	269-PAC07-0001
17	Optical fiber connector polishing disk, 1.25-mm	1	269-PAC07-0002
18	Optical fiber connector polishing rubber pad, 6-in	1	269-PAC07-0003
19	Optical fiber connector polishing film, 5-µm, 5-pack	1	269-PAC07-0004
20	Optical fiber connector polishing film, 1-µm, 5-pack	1	269-PAC07-0005
21	Optical fiber connector polishing film, 0.5-µm, 5-pack	1	269-PAC07-0006
22	Optical fiber connector crimp tool, 7-step (1 mm–4.75 mm)	1	269-PAC08-0001
23	Epoxy adhesive application syringe, 3-ml	10	269-PAC08-0003
24	Optical fiber connector end-face inspection microscope, 200×	1	269-PAC09-0001
25	Visual fault locator	1	269-PAC10-0001

\* Re-ordered products may not be identical to those in the original kit but have the same functional properties.

\*\* Spray bottle is supplied empty due to shipping safety restrictions.

# INSTALLATION, TESTING, MAINTENANCE ▶ Installation Tool Kits

## Mechanical Splicing Tool Kit

269-MSP01-01 Optical Fiber Mechanical Splicing Tool Kit, Option 1

Contents:

No.	Item	Quantity	PN for reordering*
1	Portable wedge-blade cleaver	1	269-CVR02-1A**
2	Cable cutter, round	1	078-1024
3	Cable jacket cutting and slitting tool, dia. 1.2 mm–6.4 mm	1	078-1022
4	Electrician's scissors	1	269-PAC04-0003
5	Optical fiber stripper, 3-step (2 mm–3 mm/0.9 mm/0.25 mm)	1	269-PAC05-0006
6	Kevlar shears, ceramic	1	269-PAC04-0005
7	Visual fault locator	1	269-PAC10-0001
8	Pre-moistened wipes, IPA, 1 pack	10	269-PAC03-0004
9	Cleaning agent dispensing bottle, 100 ml (3.4 fl oz)***	1	269-PAC03-0007
10	Permanent marker, fine-point, black	1	269-PAC05-0002
11	Ruler, SI/USCU, 6- or 12-in, stainless steel	1	269-PAC05-0003
12	Electrical tape, multicolor, six rolls, 18 mm x 2 m (0.7 in x 6.6 ft)	1	269-PAC05-0004
13	Storage container, five-compartment, 90 mm x 180 mm (3-½ in x 7 in), plastic, 2-pack	1	269-PAC02-0003
14	Plastic container, fiber scrap collector, dia. 70 mm (2-¾ in), locking screw lid	1	269-PAC05-0005
15	Safety goggles	1	269-PAC01-0001
	Portable carrying soft-case bag	1	

OPTICAL FIBER SYSTEMS

OPTION 1



OPTION 2



# INSTALLATION, TESTING, MAINTENANCE ▶ Installation Tool Kits

## Mechanical Splicing Tool Kit

269-MSP01-02 Optical Fiber Mechanical Splicing Tool Kit, Option 2

Contents:

No.	Item	Quantity	PN for reordering*
1	Precision disc-blade cleaver with scrap collector	1	269-CVR01-1A**
2	Cable cutter, round	1	078-1024
3	Cable jacket cutting and slitting tool, dia. 1.2 mm–6.4 mm	1	078-1022
4	Electrician's scissors	1	269-PAC04-0003
5	Optical fiber stripper, 3-step (2 mm–3 mm/0.9 mm/0.25 mm)	1	269-PAC05-0006
6	Kevlar shears, ceramic	1	269-PAC04-0005
7	Visual fault locator	1	269-PAC10-0001
8	Pre-moistened wipes, IPA, 1 pack	10	269-PAC03-0004
9	Cleaning agent dispensing bottle, 100 ml (3.4 fl oz)***	1	269-PAC03-0007
10	Permanent marker, fine-point, black	1	269-PAC05-0002
11	Ruler, SI/USCU, 6- or 12-in, stainless steel	1	269-PAC05-0003
12	Electrical tape, multicolor, six rolls, 18 mm x 2 m (0.7 in x 6.6 ft)	1	269-PAC05-0004
13	Storage container, five-compartment, 90 mm x 180 mm (3-½ in x 7 in), plastic, 2-pack	1	269-PAC02-0003
14	Plastic container, fiber scrap collector, dia. 70 mm (2-¾ in), locking screw lid	1	269-PAC05-0005
15	Safety goggles	1	269-PAC01-0001
	Portable carrying soft-case bag	1	

Re-ordered products may not be identical to those in the original kit but have the same functional properties.

\*\* For replacement blades only, use 269-CVR02-1A-1 part number.

\*\*\*Spray bottle is supplied empty due to shipping safety restrictions.



# INSTALLATION, TESTING, MAINTENANCE ▶ Installation Tool Kits

## Fiber Cleaning Kit

269-CLN01

Optical Fiber Cleaning Kit – Basic



Contents:

No.	Item	Quantity	PN for reordering*
1	Optical fiber connector cleaner dispenser type	1	269-PAC03-0001
2	Cleaning foam swabs tipped 2.5-mm pack of 50	1	269-PAC03-0002
3	Cleaning foam swabs tipped 1.25-mm pack of 50	1	269-PAC03-0003
4	Pre-moistened wipes IPA 1-pack	10	269-PAC03-0004
5	Optical fiber connector cleaning cube 120 cap.	1	269-PAC03-0005
6	Cleaning agent dispensing bottle, 100 ml (3.4 fl oz)**	1	269-PAC03-0006

\* Re-ordered products may not be identical to those in the original kit but have the same functional properties.  
 \*\* Spray bottle is supplied empty due to shipping safety restrictions.

## Maintenance Tools

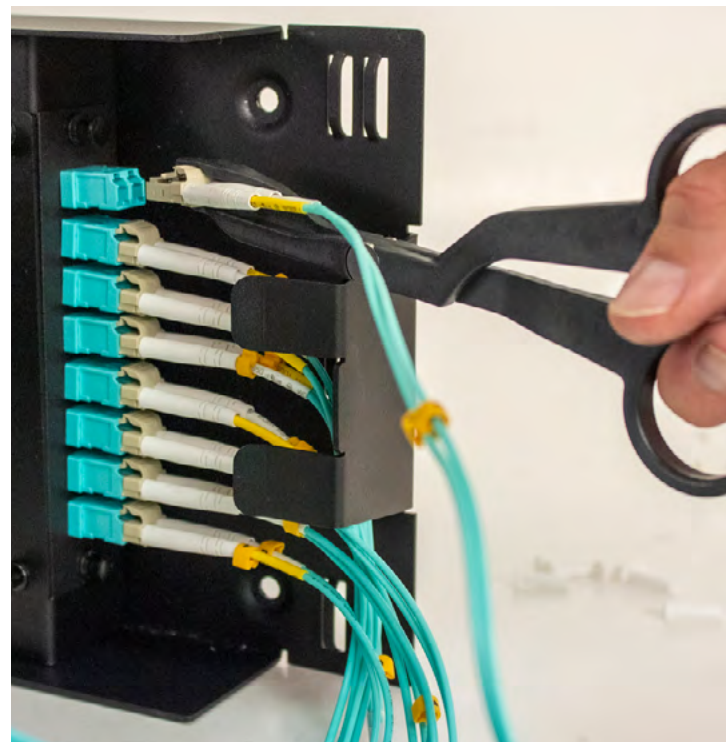
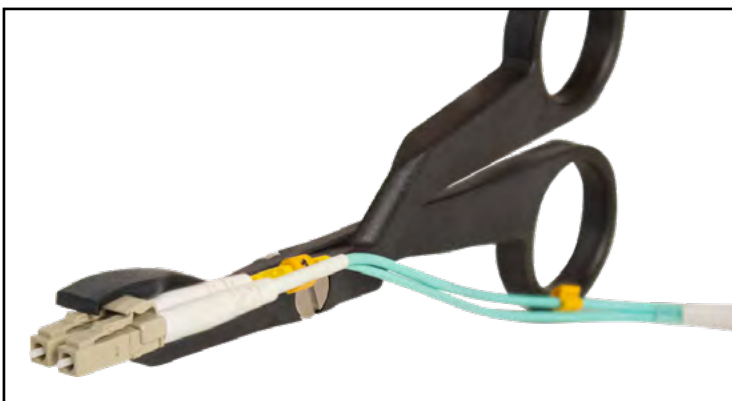
### LC Plug Insertion/Extraction Tool

269-SAM01-1A

Optical Fiber Connector Insertion-Extraction Tool LC

#### CHARACTERISTICS

Mode of operation: insertion/extraction.  
 Compatibility: LC style connectors, simplex and duplex.  
 Material: glass-filled PPS.

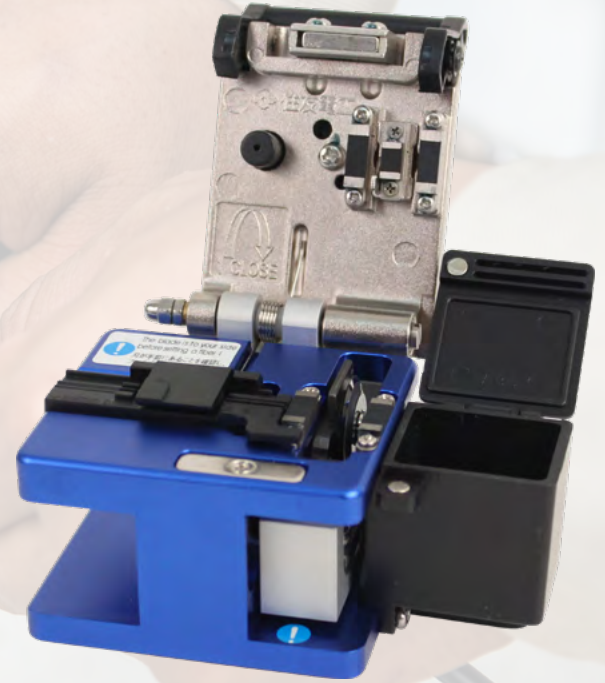


## Fiber Cleaver with Scrap Collector

- 269-CVR01-1A Optical fiber precision cleaver with scrap collector
- 269-CVR01-1A-1 Replacement blade for 269-CVR01-1A
- 269-PAC02-0001 Portable carrying soft-case bag

### CHARACTERISTICS

- Fiber count: single.
- Fiber type: silica core/clad.
- Fiber coating size: 250  $\mu\text{m}$ –900  $\mu\text{m}$ .
- Fiber cladding size: 125  $\mu\text{m}$ .
- Anvil type: automatic drop.
- Operating mode: semiautomatic.
- Blade type: rotating, 24 positions.
- Blade life: 48,000 cleaves.
- Cleave distance: 250  $\mu\text{m}$ : 9 mm–16mm;  
900  $\mu\text{m}$ : 10 mm–16 mm.
- Cleave angle:  $\leq 0.5^\circ$ .
- Dimensions: W: 65 mm (2.6 in) D:75 mm (3 in) H: 65 mm (2.6 in).
- Weight: 430 g (1 lb).
- Optional: standard tripod mounting joint.



OPTICAL FIBER SYSTEMS

## Portable Fiber Cleaver

- 269-CVR02-1A Optical fiber cleaver portable
- 269-CVR02-1A-1 Replacement blade for 269-CVR02-1A

### CHARACTERISTICS

- Fiber count: single.
- Fiber type: silica core/clad.
- Fiber coating size: 250  $\mu\text{m}$ –900  $\mu\text{m}$ .
- Fiber cladding size: 80  $\mu\text{m}$ –200  $\mu\text{m}$ .
- Blade type: wedge.
- Blade material: metal carbide.
- Blade life: 6,000 cleaves.
- Cleave distance: 2 mm–20mm.
- Dimensions: L: 124 mm (4.8 in) W: 20 mm (0.8 in) H: 40 mm (1.6 in).
- Weight: 60 g (2 oz).

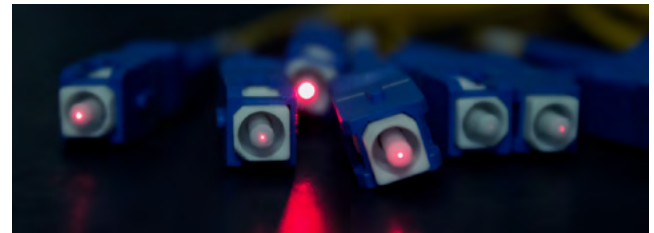
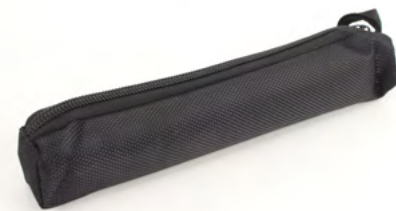


## Optical Fiber Inspection Tools ▶ Heavy-Duty Field VFL

269-VFL01 Optical Fiber Visual Fault Locator, Hand-Held, 5-mW, 2.5-mm Adapter  
 269-VFL01-1A 1.25-mm Adapter for 269-VFL01

### CHARACTERISTICS

Light source: 650-nm laser diode (Class 3R/IIIA).  
 Modes of operation: continuous or pulse (2–3 Hz).  
 Plug compatibility: 2.5-mm and 1.25-mm ferules.  
 Fiber compatibility: multimode: 50–62.5- $\mu$ m core;  
 singlemode: 8–10- $\mu$ m core.  
 Output power: singlemode fiber: >0.5 mW (-3 dB).  
 Detection distance: 6 km max.  
 Power: two 1.5-V AA;  
 continuous operation:  $\geq$ 40 h.  
 Protection: end cap per radiation safety standards.  
 Dimensions: diameter: 24 mm (1 in);  
 length: 170 mm (6.7 in) without adapter.  
 Weight: 160 g (5.6 oz) without batteries.  
 Storage temperature: -45°C – +85°C (-49°F – +185°F).  
 Operating temperature: 0°C – +70°C (32°F – +158°F).  
 Operating humidity:  $\leq$ 95 % RH non-condensing.  
 Compliance: CFR Title 21 Part 1002, ANSI/IEC/U.S. FDA Class 3R/IIIA.



## Pen-Style Pocket VFL

269-VFL02 Optical Fiber Visual Fault Locator, Pen-Style, 5-mW, 2.5-mm, Adapter  
 269-VFL02-1A 1.25-mm Adapter for 269-VFL02

### CHARACTERISTICS

Light source: 650-nm laser diode (Class 3R/IIIA).  
 Modes of operation: continuous or pulse (2–3 Hz).  
 Plug compatibility: 2.5-mm and 1.25-mm ferules.  
 Fiber compatibility: multimode: 50–62.5- $\mu$ m core;  
 singlemode: 8–10- $\mu$ m core.  
 Output power: singlemode fiber: >0.5 mW (-3 dB).  
 Detection distance: 6 km max.  
 Power: two 1.5-V AAA alkaline;  
 continuous operation:  $\geq$ 40 h.  
 Protection: end cap per radiation safety standards.  
 Dimensions: diameter: 14 mm (0.6 in);  
 length: 170 mm (6.7 in) without adapter.  
 Weight: 88 g (3 oz) with batteries.  
 Storage temperature: -20°C – +60°C (-4°F – +140°F).  
 Operating temperature: 0°C – +40°C (32°F – +104°F).  
 Operating humidity:  $\leq$ 95 % RH non-condensing.  
 Compliance: CFR Title 21 Part 1002, ANSI/IEC/U.S. FDA Class 3R/IIIA.



## Light Sources and Power Meters

269-OLS01-1235	Optical Fiber Tester – Light Source, Dual-Emitter, Four-Wavelength (850/1300 nm, 1310/1550 nm)
269-OPM01	Optical Fiber Tester – Power Meter
269-OTK01-0101*	Optical Fiber Tester – Light Source and Power Meter Kit (269-OLS01-1235, 269-OPM01)

\* Includes soft-case carrying bag accommodating both units and accessories.



### 269-OLS01-1235

- Kit includes:
- 1 × 269-OLS01-1235 unit
  - 1 × Soft-case carrying pouch
  - 1 × Software CD
  - 1 × USB cable
  - 1 × User guide
  - 1 × Calibration certificate
  - 2 × FC/PC adapter
  - 2 × SC/PC adapter
  - 3 × 2.5-mm split ceramic sleeve

Light source: dual LD, Class I.

Source wavelengths: 850 nm;  
1300 nm;  
1310 nm;  
1550 nm.

Source spectral width: 5 nm.

Source stability: short-term (15 min):  $\pm 0.10$  dB  
at 850/1300 nm;  
 $\pm 0.05$  dB at 1310/1550 nm;  
long-term (8 h):  $\pm 0.20$  dB at 850/1300 nm;  
 $\pm 0.10$  dB at 1310/1550 nm.

Source output power:  $-5$  dBm  $\pm 0.5$  dB.

Source modulation: 270 Hz;  
1 kHz;  
2 kHz.

Central wavelengths: 850  $\pm 20$  nm;  
1300  $\pm 20$  nm;  
1310  $\pm 20$  nm;  
1550  $\pm 20$  nm.

Display: LCD monochrome;  
backlight mode.

Interface type: interchangeable;  
FC/PC;  
SC/PC.

Power supply: rechargeable batteries: 2 × Ni-MH AA  
(2500 mA-h);  
non-rechargeable batteries: 2 × AA R6 1.5 V;  
low-battery indicator;  
auto power off.

Storage temperature:  $-20^{\circ}\text{C}$   $-+70^{\circ}\text{C}$  ( $-4^{\circ}\text{F}$   $-+158^{\circ}\text{F}$ ).

Operating temperature:  $-10^{\circ}\text{C}$   $-+50^{\circ}\text{C}$  ( $14^{\circ}\text{F}$   $-+122^{\circ}\text{F}$ ).

Operating humidity:  $\leq 90$  % RH non-condensing.

Dimensions: L: 160 mm W: 75 mm H: 45 mm;  
L: 6.3 in W: 3 in H: 1.8 in

Weight: 270 g (9.5 oz).



### 269-OPM01

- Kit includes:
- 1 × 269-OPM01 unit
  - 1 × Soft-case carrying pouch
  - 1 × Software CD
  - 1 × USB cable
  - 1 × User guide
  - 1 × Calibration certificate
  - 1 × FC/PC adapter
  - 1 × SC/PC adapter

Wavelength range: 800–1700 nm;  
Calibrated wavelengths: 850 nm;  
1300 nm;  
1310 nm;  
1490 nm;  
1550 nm;  
1625 nm.

Wavelength detection: fully automatic (input power  $\geq -40$  dBm);  
digital protocol.

Modulation detection: 270 Hz, 1 kHz, 2 kHz (input power  
 $\geq -40$  dBm).

Reference power: fully automatic;  
digital protocol.

Detector type: InGaAs.

Measuring range:  $-70$  dBm  $-+10$  dBm at 1550 nm.

Accuracy:  $\pm 0.2$  dB  $\pm 1$  nW ( $\pm 5$  %  $\pm 1$  nW).

Resolution: 0.01 dB ( $-60$  dBm  $-+10$  dBm);  
0.10 dB ( $-70$  dBm  $- -60$  dBm).

Linearity:  $\pm 5$  %.

Maximum distance: up to 150 km ( $-90$  mi);

Display: LCD monochrome;  
backlight mode.

Interface type: interchangeable;  
FC/PC;  
SC/PC.

Data Storage: 1,000 test records.

Data interface: USB.

Storage temperature:  $-20^{\circ}\text{C}$   $-+70^{\circ}\text{C}$  ( $-4^{\circ}\text{F}$   $-+158^{\circ}\text{F}$ ).

Operating temperature:  $-10^{\circ}\text{C}$   $-+50^{\circ}\text{C}$  ( $14^{\circ}\text{F}$   $-+122^{\circ}\text{F}$ ).

Operating humidity:  $\leq 90$  % RH non-condensing.

Power supply: rechargeable batteries: 2 × Ni-MH AA  
(2500 mA-h);  
non-rechargeable batteries: 2 × AA R6 1.5 V;  
low-battery indicator;  
auto power off.

Dimensions: L: 160 mm W: 75 mm H: 45 mm;  
L: 6.3 in W: 3 in H: 1.8 in

Weight: 270 g (9.5 oz).



# MULTIMEDIA SYSTEMS



# Coaxial Cable - RG6, RG59, RG11

RG6	
Standard	Quad
<b>Bare Copper Conductor</b>	
107-2312/WH (CM) 107-2311/BK (CM) 107-2311/BK/RB (CMR)	107-2310/WH (CM) 107-2309/BK (CM)  107-2327/5WH (CM) 107-2326/5BK (CM)
<b>Copper-Clad Steel (CCS) Conductors</b>	
107-1956BK6SR (CMR) 107-1957WH6SR (CMR)	107-1952BK6Q1BX (CM) 107-1953WH6Q1BX (CM)
107-1237WH6S1BX (CM) 107-1234BK6S1BX (CM)	107-1955WH6Q500 (CM) 107-1954BK6Q500 (CM)
107-1236WH6S500 (CM) 107-1235BK6S500 (CM)	107-1952BK6Q1WS (CM)
107-1237WH6S1RB (CM) 107-1234BK6S1RB (CM)	
<b>CCS with Messenger</b>	
107-1233BK/MESG (CM)	-
<b>CCS with Plenum Jacket</b>	
107-2316/P/WH (CMP) 107-2316/P/BK (CMP)	107-2315/P/WH (CMP) 107-2315/P/BK (CMP)
<b>Dual Cable Siamese CCS</b>	
107-2320/6DSBX (CM)	-
<b>CCS Direct Burial (Gel-Flooded Core)</b>	
107-1234/DB/6S (CMX)	107-1952/DB/6Q (CMX)

RG11	
Standard	Quad
<b>Bare Copper Conductor</b>	
107-1034/R11PBK (CMP)	-
<b>Copper-Clad Steel (CCS) Conductors</b>	
107-1032BK/R11 (CM)	107-1032BK/R11Q (CM)
<b>CCS Direct Burial</b>	
107-1032DB/R11 (CM)	107-1032DB/R11Q (CM)

Applications:  
Digital HDTV  
CATV and Digital  
Satellite Installations

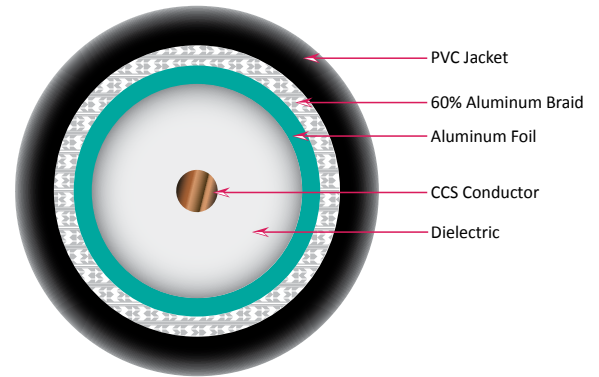
RG59
<b>CCS Conductors</b>
107-1237WH6S1BX (CM) 107-1234BK6S1BX (CM)
107-1236WH6S500 (CM) 107-1235BK6S500 (CM)
107-1237WH6S1RB (CM) 107-1234BK6S1RB (CM)
<b>CCS with Messenger</b>
107-1233BK/MESG (CM)
<b>Bare Copper Conductors with Plenum Jacket</b>
107-2318/P/WH (CMP) 107-2318/P/BK (CMP)
<b>CCS with Riser Jacket</b>
107-1956BK6SR (CMR) 107-1957WH6SR (CMR)
<b>Dual Cable Siamese CCS (UV-Resistant Jacket)</b>
107-2320/6DSBX (CM)
<b>95% CCS Siamese with 18/2 Power Cables</b>
107-2179/BK (CM)
<b>85% CCS Siamese with 18/2 Power Cables</b>
107-2321/BK & 107-2322/WH 107-2323/BK & 107-2324/WH
<b>CCS Siamese with Plenum Jacket</b>
107-2319/P/BK (CMP) 107-2319/P/WH (CMP)
<b>CCS Direct Burial Siamese with 18 AWG Power Cables</b>
107-2179/DB/BK (CM)

## Part Number Anatomy:

XXX-XXXX/P/XX - Plenum-Rated  
 XXX-XXXX/BK/XXXXX - Black color  
 XXX-XXXX/WH/XXXXX - White color  
 XXX-XXXXXXWS - Wooden Spool  
 XXX-XXXXXXRB - Reel in Box  
 XXX-XXXXXXBX - Pullout Box  
 XXX-XXXXXSXX - Standard Shield  
 XXX-XXXXXQXX - Quad Shield  
 XXX-XXXX/MESG - With Messenger

# Coaxial Cable ▶ RG6

## RG6 Standard Shield - CM CCS Conductor



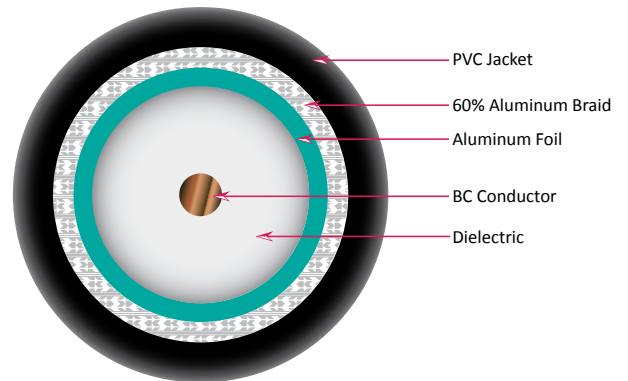
Item #	Description
107-1235BK6S500	CCS Conductor, 500 ft Pull Box, Black
107-1236WH6S500	CCS Conductor, 500 ft Pull Box, White
107-1234BK6S1BX	CCS Conductor, 1000 ft Pull Box, Black
107-1237WH6S1BX	CCS Conductor, 1000 ft Pull Box, White
107-1956BK6SR	CCS Conductor, 1000 ft Pull Box, Black
107-1957WH6SR	CCS Conductor, 1000 ft Pull Box, White
107-1234BK6S1RB	CCS Conductor, 1000 ft, <b>Reel-in-Box</b> , Black
107-1237WH6S1RB	CCS Conductor, 1000 ft, <b>Reel-in-Box</b> , White

### Features:

- High-Grade RG6 Coaxial Cable
- Suitable for Digital HDTV Applications, CATV and Digital Satellite Installations
- 18 AWG Solid Copper-Clad Steel Conductor
- Shield: Aluminum Foil, 60% Aluminum Braid
- Fully Sweep Tested to 3.0 GHz
- CM, CATV, CL2
- ETL-listed, RoHS Compliant

MULTIMEDIA SYSTEMS

## RG6 Standard Shield - CM Bare Copper Conductor



Item #	Description
107-2311/BK	Solid Bare Copper Conductor, 1000 ft, Pull Box, Black
107-2311/BK/RB	Solid Bare Copper Conductor, 1000 ft, Reel in Box, Black
107-2312/WH	Solid Bare Copper Conductor, 1000 ft, Pull Box, White

### Features:

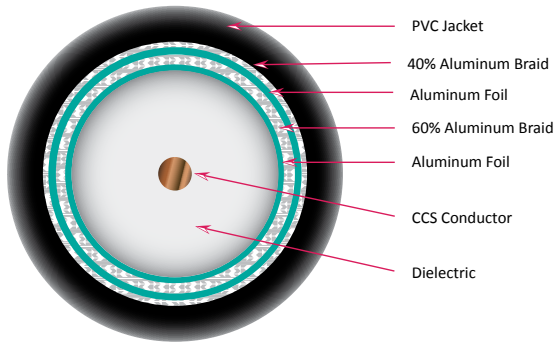
- High-Grade RG6 Coaxial Cable Suitable for Digital HDTV Applications, CATV and Digital Satellite Installations
- 18 AWG Solid Bare Copper Conductor
- Shield: Aluminum Foil, 60% Aluminum Braid
- Fully Sweep Tested to 3.0 GHz
- CM, CATV, CL2
- ETL-listed, RoHS Compliant

# Coaxial Cable ▶ RG6

## RG6 Quad Shield - CM CCS Conductor

RG6, CCS Conductor

Quad Shield: Aluminum Foil, 60% Aluminum Braid, Aluminum Foil, 40% Aluminum Braid, 18 AWG, 75 OHM



### Features:

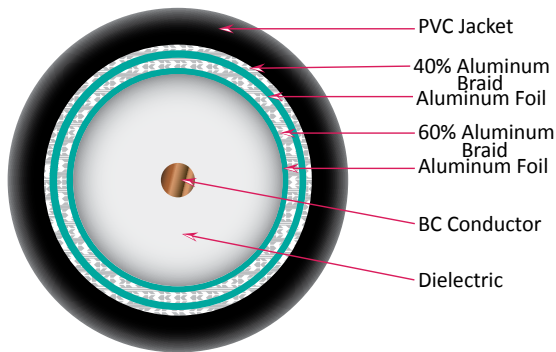
- High-Grade RG6 Quad Shield
- Suitable for Digital HDTV applications, CATV, TV antenna and Satellite TV
- 18 AWG Copper Clad Steel Conductor
- Shield: Aluminum Foil, 60% Aluminum Braid, Aluminum Foil, 40% Aluminum Braid
- Sweep Tested to 3.0 GHz
- CM, CL2 Rated
- ETL-listed, RoHS Compliant, ISO 001:2008ISO



Item #	Description
107-1954BK6Q500	500 ft Pull Box, Black
107-1955WH6Q500	500 ft Pull Box, White
107-1952BK6Q1BX	1000 ft Pull Box, Black
107-1953WH6Q1BX	1000 ft Pull Box, White

## RG6 Quad Shield - CM Bare Copper Conductor

Quad Shield: Aluminum Foil, 60% Aluminum Braid, Aluminum Foil, 40% Aluminum Braid, 18 AWG, 75 OHM



### Features:

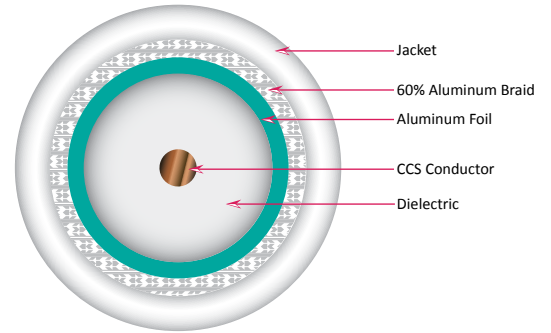
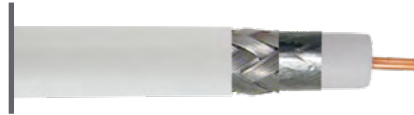
- High-Grade RG6 Coaxial Cable
- Suitable for Digital HDTV Applications, CATV and Digital Satellite Installations
- 18 AWG Solid Bare Copper Conductor
- Shield: Aluminum Foil, 60% Aluminum Braid, Aluminum Foil, 40% Aluminum Braid
- Fully Sweep Tested to 3.0 GHz
- CM, CATV, CL2
- ETL-listed, RoHS Compliant

Item #	Description
107-2326/5BK	Solid Bare Copper Conductor, 500 ft, Pull Box, Black
107-2327/5WH	Solid Bare Copper Conductor, 500 ft, Pull Box, White
107-2309/BK	Solid Bare Copper Conductor, 1000 ft, Pull Box, Black
107-2310/WH	Solid Bare Copper Conductor, 1000 ft, Pull Box, White

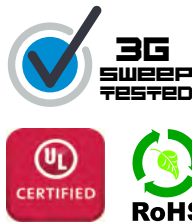
# Coaxial Cable ▶ RG6

## RG6 CMP Plenum - Standard Shield CCS

RG6, CMP, CCS Conductor  
 Dual Shield: Aluminum Foil 60% Aluminum Braid, 18 AWG, 75 OHM



Item #	Description
107-2316/P/BK	1000 ft Spool, Black
107-2316/P/WH	1000 ft Spool, White



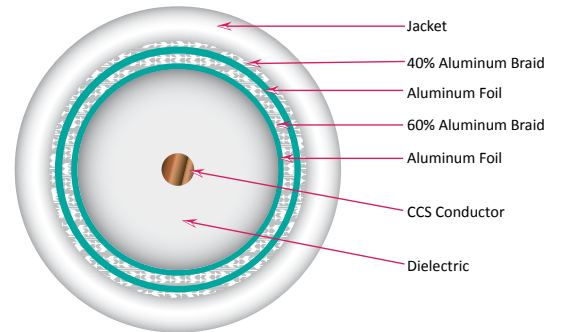
### Features:

- High-Grade RG6 Coaxial Cable
- Suitable for Digital HDTV Applications, CATV
- 18 AWG Solid CCS Conductor
- Shield: Aluminum Foil, 60% Aluminum Braid
- CMP-Rated (Plenum)
- UL-listed, RoHS Compliant
- 1000 ft Wooden Spool

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## RG6 CMP Plenum - Quad Shield CCS

RG6, CMP, CCS Conductor  
 Quad Shield: Aluminum Foil, 60% Aluminum Braid, Aluminum Foil, 40% Aluminum Braid, 18 AWG, 75 OHM



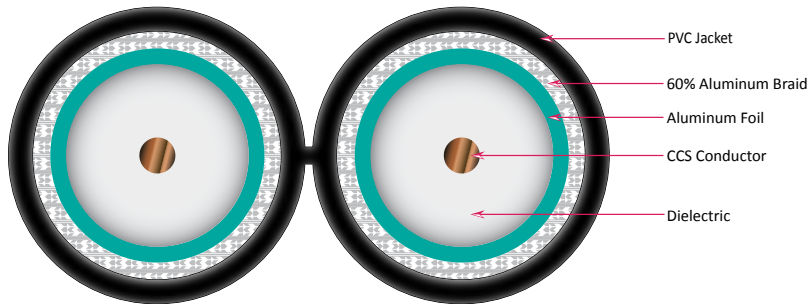
Item #	Description
107-2315/P/BK	1000 ft Spool, Black
107-2315/P/WH	1000 ft Spool, White



### Features:

- High-Grade RG6 Coaxial Cable
- Suitable for Digital HDTV Applications, CATV
- 18 AWG Solid CCS Conductor
- Shield: Aluminum Foil, 60% Aluminum Braid, Aluminum Foil, 40% Aluminum Braid
- CMP-Rated
- UL-listed, RoHS Compliant
- 1000 ft Wooden Spool

**RG6 Standard Shield - Dual Cable Siamese CCS**



PVC Jacket  
60% Aluminum Braid  
Aluminum Foil  
CCS Conductor  
Dielectric



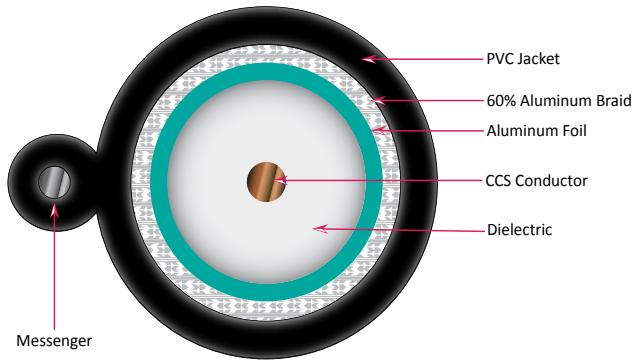
**Features:**

- High-Grade Dual RG6
- 18 AWG CCS Solid Conductor
- Shield: Aluminum Foil, 60% Aluminum Braid
- Dual Coaxial Cable
- Swept Tested to 3.0 GHz
- 75 Ohm Impedance
- PVC Jacket
- ETL-listed, RoHS Compliant



Item #	Description
107-2320/6DSBX	Dual RG6, CCS Conductor, Dual Shield: Aluminum Foil, 60% Aluminum Braid, 18 AWG, 3.0 GHz, 500 ft, Pull Box, Black

**RG6 Standard Shield CCS With Messenger**



PVC Jacket  
60% Aluminum Braid  
Aluminum Foil  
CCS Conductor  
Dielectric  
Messenger



**Features:**

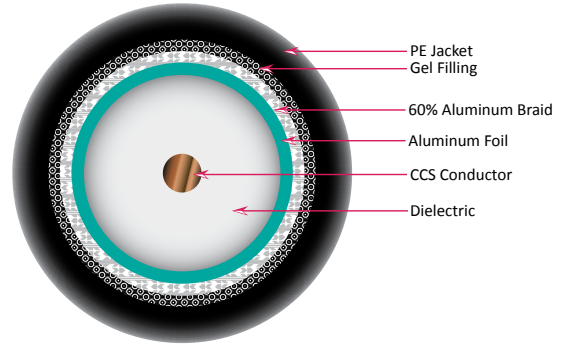
- High-Grade RG6 Coaxial Cable with Messenger (Aerial Installations)
- 18 AWG CCS Conductor
- Shield: Aluminum Foil, 60% Aluminum Braid
- 75 Ohm Impedance
- PVC Jacket, CM Rated
- ETL-listed, RoHS Compliant

Item #	Description
107-1233BK/MESG	RG6, with messenger, CCS Conductor, Dual Shield: Aluminum Foil, 60% Aluminum Braid, 18 AWG, 1000 ft Spool, Black

MULTIMEDIA SYSTEMS

# Coaxial Cable ▶ RG6

## RG6 Standard Shield CCS Conductor - Direct Burial



### Features:

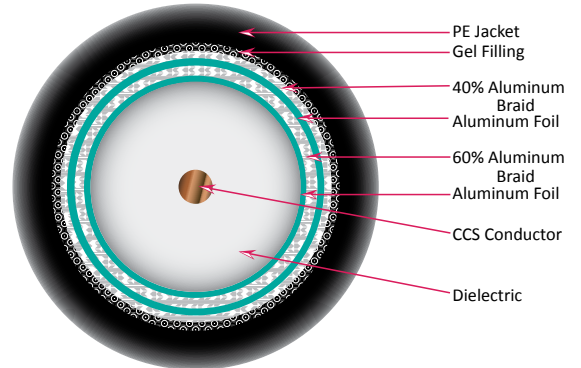
- High-Grade RG6 Direct Burial
- 18 AWG CCS Conductor
- Shield: Aluminum Foil, 60% Aluminum Braid
- 75 Ohm Impedance
- Polyethylene (PE) Jacket
- Direct Burial (Gel Filled)
- ETL-Verified, RoHS Compliant
- 1000 ft Wooden Spool



Item #	Description
107-1234/DB/6S	RG6, Direct Burial, CCS Conductor, Dual Shield: Aluminum Foil, 60% Aluminum Braid, Gel Filling, 18 AWG, 3.0 GHz, 1000 ft Spool, Black

## RG6 Quad Shield CCS Conductor - Direct Burial

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### Features:

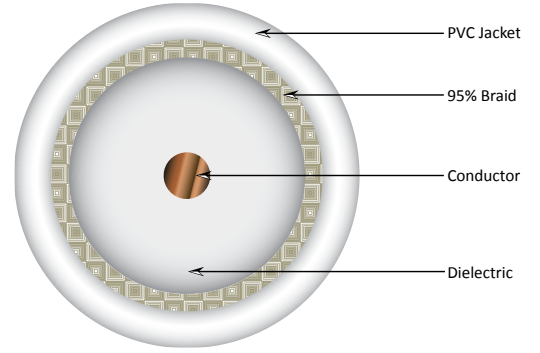
- High-Grade RG6 Quad Shield Direct Burial
- 18 AWG CCS Conductor
- Shield: Aluminum Foil, 60% Aluminum Braid, Aluminum Foil, 40% Aluminum Braid
- 75 Ohm Impedance
- Polyethylene Jacket (PE)
- Direct Burial (Gel-Coated)
- ETL-Verified, RoHS Compliant
- 1000 ft Spool



Item #	Description
107-1952/DB/6Q	RG6, Direct Burial, CCS Conductor, Quad Shield: Aluminum Foil, 60% Aluminum Braid, Aluminum Foil, 40% Aluminum Braid, Gel-Coated, 18 AWG, 3.0 GHz, 1000 ft Spool, Black

# Coaxial Cable ▶ RG59

## RG59 Plenum, 95% CCA Braid - Bare Copper Conductor

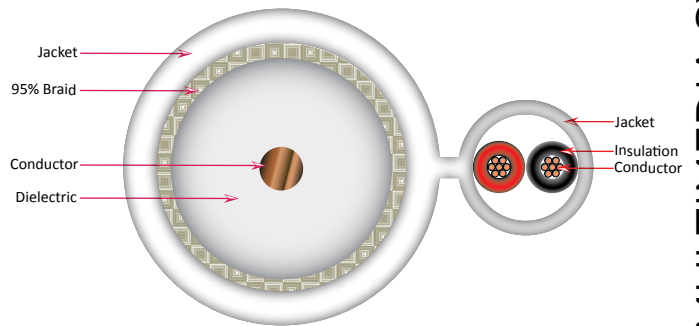


Item #	Description
107-2318/P/WH	RG59, CMP, Bare Copper Conductor, Shield: 95% CCA Braid, 20 AWG, 1000 ft Spool, White
107-2318/P/BK	RG59, CMP, Bare Copper Conductor, Shield: 95% CCA Braid, 20 AWG, 1000 ft Spool, Black

### Features:

- 20 AWG Solid Bare Copper Conductor for Optimal Signal Transmission
- 95% CCA Braid coverage for optimum signal protection
- Plenum-Rated Jacket
- UL-Listed, RoHS Compliant
- 1000 ft Spool

## RG59 Siamese Plenum 95% CCA Braid - Bare Copper Conductor with 18/2 Power Cable



Item #	Description
107-2319/P/BK	RG59 Siamese + 18 AWG Power Cables, CMP, Bare Copper Conductor, Shield: 95% CCA Braid, 20 AWG, 1000 ft Spool, Black
107-2319/P/WH	RG59 Siamese + 18 AWG Power Cables, CMP, Bare Copper Conductor, Shield: 95% CCA Braid, 20 AWG, 1000 ft Spool, White

### Features:

- Siamese RG59 Coaxial Cable with 18 AWG Stranded Power Cables
- 20 AWG Solid Bare Copper Conductor for optimal signal transmission
- 95% CCA Braid for signal protection
- Indoor Cable Application for: CCTV
- UL-listed, RoHS Compliant, ISO 9001:2008
- 1000 ft Wooden Spool



Compression/Crimping Tool  
078-1018



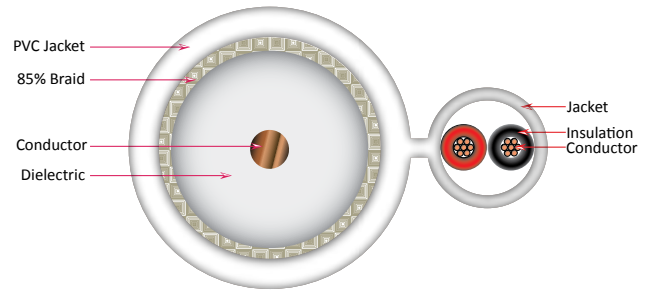
Universal Stripping Tool  
078-1022



Cable Cutter (Up to 0.42/10.7mm)  
078-1024

## RG59 Siamese Cable 85% CCA Braid with 18/2 Power Cable

RG59 Siamese + 18 AWG Power Cables, **CCS Conductor**, Shield: 85% CCA Braid, 20 AWG



Item #	Description
107-2321/BK	1000 ft, Spool, Black
107-2322/WH	1000 ft, Spool, White
107-2323/BK	500 ft, Pull Box, Black
107-2324/WH	500 ft, Pull Box, White

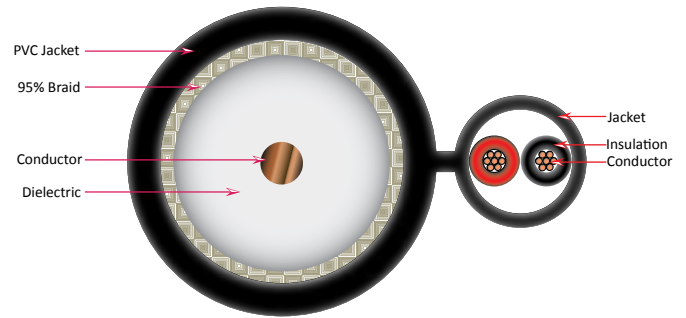
### Features:

- Siamese RG59 Coaxial Cable with 18 AWG Stranded Power Cables
- Coaxial Cable for CCTV Transmissions
- 20 AWG CCS Conductor
- 85% CCA Braid Coverage For Signal Protection
- CM Rated Jacket, CL2 Rated Cable
- ETL-Verified, RoHS Compliant, ISO 9001:2008
- Available in 1000 ft Reel in Box and 500 ft Pull Box



# Coaxial Cable ▶ RG59 Siamese

## RG59 Siamese Cable 95% CCA Braid



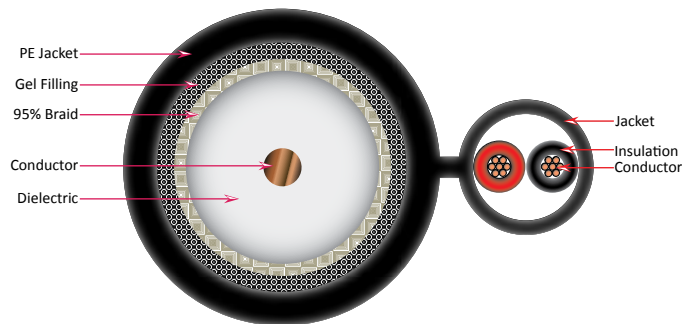
Item #	Description
107-2179/BK	RG59 Siamese, + 18 AWG Power Cables, Bare Copper Conductor, Shield: 95% CCA Braid, 20 AWG, 1000 ft Spool, Black

### Features:

- Siamese RG59 Coaxial Cable with 18 AWG Stranded Power Cables
- 20 AWG Solid Bare Copper Conductor
- 95% CCA Braid for signal protection
- Indoor Cable Application for: CCTV
- ETL-listed, RoHS Compliant, ISO 9001:2008
- Available in a 1000 ft or 500 ft Reel-in-box
- CM Rated Jacket

# RG59 Siamese, Direct Burial, 95% CCA Braid

## Bare Copper Conductor



Check availability

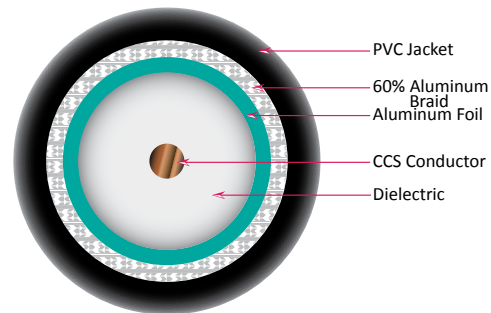
Item #	Description
107-2179/DB/BK	RG59 Siamese Direct Burial, + 18 AWG Power Cables, Bare Copper Conductor, Shield: 95% CCA Braid, Gel-Coated, 20 AWG, CL2, Polyethylene Jacket, 1000 ft Spool, Black

### Features:

- Siamese RG59 Coaxial Cable with 18 AWG Stranded Power Cables
- 20 AWG Solid BC Conductor
- 95% CCA Braid for signal protection
- Direct Burial (Gel-Coated)
- Polyethylene Jacket (PE)
- 75 Ohm Impedance
- ETL-Verified, RoHS Compliant, ISO 9001:2008
- 1000 ft Wooden Spool

# Coaxial Cable ▶ RG11

## RG11 Standard Shield - CCS Conductor



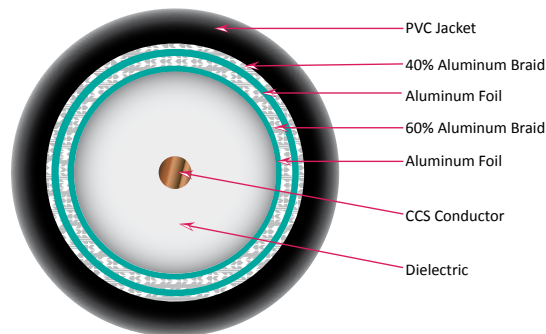
### Features:

- High-Grade RG11 Standard Shield
- 14 AWG CCS Conductor
- Shield: Aluminum Foil, 60% Aluminum Braid
- 75 Ohm Impedance
- PVC Jacket, CL2 Rated
- ETL-listed, RoHS Compliant, ISO 9001:2008
- Supplied in 1000 ft Spool

Item #	Description
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107-1032BK/R11	RG11, CCS Conductor, Shield: Aluminum Foil, 60% Aluminum Braid, 14 AWG, CL2 Rated, 1000 ft Spool, Black
----------------	---

## RG11 Quad Shield - CCS Conductor



### Features:

- High-Grade RG11 Quad Shield
- 14 AWG CCS Solid Conductor
- Shield: Aluminum Foil, 60% Aluminum Braid, Aluminum Foil, 40% Aluminum Braid
- 75 Ohm Impedance
- Meets NEC Article 820 V Rating
- ETL-listed, RoHS Compliant, ISO 9001:2008
- Supplied in 1000 ft Spool

Item #	Description
--------	-------------

107-1032BK/R11Q	RG11, CCS Conductor, Quad Shield: Aluminum Foil, 60% Aluminum Braid, Aluminum Foil, 40% Aluminum Braid, 14 AWG, CL2, CM, PVC Jacket, 1000 ft Spool, Black
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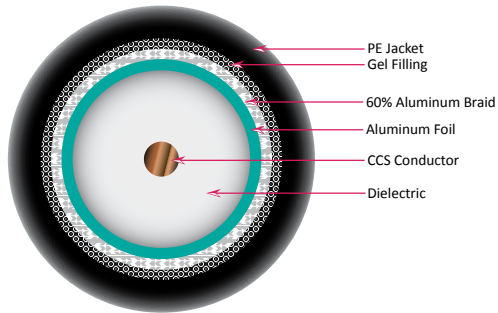
MULTIMEDIA SYSTEMS



*We added an extra layer of wrapping to protect your cable from damaging during shipping.*

# Coaxial Cable ▶ RG11

## RG11 Standard Shield CCS Direct Burial



### Features:

- High-Grade RG11 Direct Burial
- 14 AWG CCS Solid Conductor
- Shield: Aluminum Foil, 60% Aluminum Braid
- Direct Burial Gel Filled
- 75 Ohm Impedance
- ETL-Verified, RoHS Compliant, ISO 9001:2008
- Supplied in 1000 ft Spool

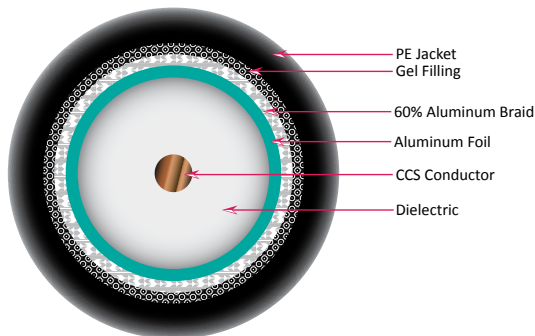
### Item #

107-1032/DB/R11

### Description

RG11 Direct Burial, CCS Conductor, Dual Shield: Aluminum Foil, 60% Braid, Gel Filled, 14 AWG, CL2, PE Jacket, 1000 ft Spool, Black

## RG11 Quad Shield CCS Direct Burial



### Features:

- High-Grade RG11 Direct Burial
- 14 AWG CCS Solid Conductor
- Shield: Aluminum Foil, 60% Aluminum Braid, Aluminum Foil, 40% Aluminum Braid
- Direct Burial Gel Filled
- 75 Ohm Impedance
- ETL-Verified, RoHS Compliant, ISO 9001:2008

### Item #

107-1032/DB/R11Q

### Description

RG11 Direct Burial, CCS Conductor, Quad Shield: Aluminum Foil, 60% Braid, Aluminum Foil, 40% Aluminum Braid, Gel Filled, 14 AWG, PE Jacket, 1000 ft Spool, Black

078-1019  
Terminates RG11



083-1044/CPRG11  
Compression Type Connector for RG11



078-1256  
Coaxial Stripper



# Coax Connectors

## RG6 STANDARD SHIELD

083-1041/CP/S



083-1041/S



083-1041/PCP/S



## RG6 QUAD SHIELD

083-1042/CP/Q



083-1042/Q



083-1042/PCP/Q



## ADD-ON TOOLS

078-1018  
Terminates RCA, BNC, RG59, RG6



078-2156  
Coaxial Stripper



078-1024  
Cuts wire up to 0.42-10.7mm



078-1019  
Terminates RG11



## RG59

083-1040/CR/B



083-1045/PCPBNC



After crimping



083-1043/CP/BNC



## RG11

083-1044/CPRG11



### Features:

- Compression, crimping or twist-on types available
- Crimping and Compression types work great with Vertical Cable Crimping and Compression Tools
- Twist-on type requires no tool

### Item #

### Description

RG6	083-1041/CP/S	F-Type Male Connector, Compression Type for RG6, Standard Shielded, <b>50 per bag</b>
	083-1042/CP/Q	F-Type Male Connector, Compression Type, for RG6 Quad Shielded, <b>100 per bag</b>
	083-1041/S	F-Type Male Connector, Twist-On Type, for RG6 Standard Shielded, <b>100 per bag</b>
	083-1042/Q	F-Type Male Connector, Twist-On Type, for RG6 Quad Shielded, <b>100 per bag</b>
	083-1041/PCP/S	Plenum F-Type Connector for Standard Shield RG6 Plenum Coax Cable, <b>25 per pack</b>
RG59	083-1040/CR/B	BNC Crimping Type Connector for RG59, <b>100 per bag</b>
	083-1045/PCPBNC	BNC Connector Compression Type for RG59 Plenum Coax Cable, <b>25 per pack</b>
	083-1043/CP/BNC	BNC Compression Type Connector for RG59, <b>100 per bag</b>
RG11	083-1044/CPRG11	Compression Type Connector for RG11 Dual and Quad Shield, <b>50 per bag</b>

**SOLD INDIVIDUALLY**

# Keystone Inserts & Coax Connectors



037-317AL

037-318IV

037-320BK

**NEW**



037-321GY

037-319WH

037-319WH/3G

**NEW**



037-329GY

037-325AL

037-326IV

037-327WH

037-328BK

Item #	Description
037-317AL	F Keystone Insert, Nickel Plated, Almond
037-318IV	F Keystone Insert, Nickel Plated, Ivory
037-319WH	F Keystone Insert, Nickel Plated, White
037-319WH/3G	F-81 Keystone Insert, Nickel Plated, 3.0 GHz Rated, Blue Insulator, White
037-320BK	F Keystone Insert, Nickel Plated, Black
037-321GY	F Keystone Insert, Nickel Plated, Gray
037-325AL	Blank Keystone Insert, Almond
037-326IV	Blank Keystone Insert, Ivory
037-327WH	Blank Keystone Insert, White
037-328BK	Blank Keystone Insert, Black
037-329GY	Blank Keystone Insert, Gray



### Features:

- Keystone inserts snap in and out of wallplates securely
- Nickel plating
- 100 per bag

## Wall Plates ▶ HDMI Wall Plates



Any Wall Plate

245-KJC/FF/180



245-WP/H1R

245-WP/H2R

245-WP/HF81

028-WP/2XF81

028-WP/1XF81

### Features:

- HDMI, TV & Home Theater Wall Plates feature various connection combinations
- Female HDMI ports feature 180° or 90° HDMI coupler jacks

Item #	Description
245-WP/1H/180	HDMI Wall Plate - 1 Port, 180°
245-WP/2H/180	HDMI Wall Plate - 2 Port, 180°
245-WP/2H/90	HDMI Wall Plate - 2 Port, 90°
245-WP/H1R	HDMI + 1XRCA Decora Wall Plate, Gold-Plated, White
245-WP/H2R	HDMI + 2XRCA Decora Wall Plate, Gold-Plated, White
245-WP/HF81	HDMI + F81 Decora Wall Plate, Gold-Plated, White
028-WP/1XF81	TV Wall Plate with one F81 Connector
028-WP/2XF81	TV Wall Plate with two F81 Connectors
028-WP/1X81/3G	Nickel Wall Plate with one 3G F81 Connector

# HDMI Digital Cables & Accessories

## Premium HDMI High Speed Digital Cables with Ethernet



242 Series



3FT

Retail Packaging



100FT

Item #	Description
242-030/3FT	HDMI 2.0 Ultra HD 4Kx2K 60Hz / 3D, Gold-Plated 3 FT
242-032/6 FT	HDMI 2.0 Ultra HD 4Kx2K 60Hz / 3D, Gold-Plated 6 FT
242-034/10FT	HDMI 2.0 Ultra HD 4Kx2K 60Hz / 3D, Gold-Plated 10 FT
<b>242-037/15FT</b>	<b>High-Speed HDMI Cable CL3-Rated (In-Wall) - NEW</b>
242-038/25FT	HDMI 2.0 Ultra HD 4Kx2K 60Hz / 3D, Gold-Plated 25 FT
242-040/30FT	HDMI 2.0 Ultra HD 4Kx2K 60Hz / 3D, Gold-Plated 30 FT
242-042/50FT	HDMI 2.0 Ultra HD 4Kx2K 60Hz / 3D, Gold-Plated 50 FT
242-043/75FT	HDMI 2.0 Ultra HD 4Kx2K 60Hz / 3D, Gold-Plated 75 FT (Directional)
242-044/100FT	HDMI 2.0 with Amplifier, Ultra HD 4Kx2K 60Hz / 3D, 100 FT (Directional)



**HDCP Compliant**

**Features:**

- High-speed HDMI Cable (100FT with Amplifier)
- Gold-Plated Contacts, Type-A 19pin
- 18 Gbps – Ultra HD 2160p
- 2K/4K – 60 Hz, 120 Hz, 240 Hz, 360 Hz
- HDR, HEC, ARC, 3D, HDCP Compliant
- UL-listed RoHS Compliant
- Directional – Input / Output (75FT & 100FT)
- CL3 Rated for In-wall installations (for 25, 30, 50, 75 and 100 FT only)

MULTIMEDIA SYSTEMS

# AUDIO CABLE



**Features:**

- Conductors: Oxygen-Free Stranded Bare Copper
- Stranded Conductors Provide Additional Flexibility
- Insulation Material: PVC
- Flame Retardant Test: CMR CL3
- ETL-listed, RoHS Compliant
- Available in a Wooden Spool or Pull Box

**Direct Burial Features:**

- Durable Weather Resistant Jacket
- High-Strand Oxygen Free Bare Copper Conductors
- Suitable for Direct Burial
- UV Rated Outer Jacket
- Water Block Tape



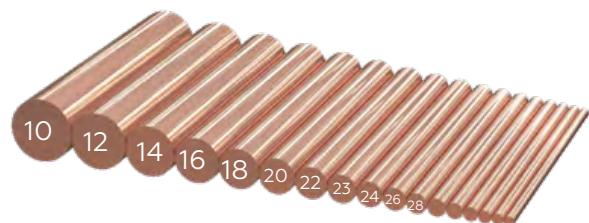
# Audio Cable

## High-Strand Audio Cable | CMR (Riser-Rated) CL3R

High-Strand Audio Cable							
UNSHIELDED							
12/2	12/4	14/2	14/4	16/2	16/4	18/2	18/4
65 strand		41 strand		65 strand		16 strand	
209-2324 500 ft pull box	209-2319 500 ft spool	209-2320/BK 500 ft pull box	209-2321/BK 500 ft pull box	209-2315 500 ft pull box	209-2316 500 ft pull box	209-2318 500 ft pull box	209-2329 500 ft pull box
209-2324/BK 500 ft pull box	209-2319/BK 500 ft spool	209-2320 500 ft pull box	209-2321 500 ft pull box	209-2315/BK 500 ft pull box	209-2316/PR 500 ft pull box	209-2318/BK 500 ft pull box	209-2329/BK 500 ft pull box
309-2040/5BK 500 ft pull box	309-2070/5WH 500 ft spool	209-2320/PR 500 ft pull box	209-2321/PR 500 ft pull box	209-2315/PR 500 ft pull box	209-2316/BK 500 ft pull box	209-2327 500 ft pull box	309-3080/5BK 500 ft pull box
309-2050/5WH 500 ft pull box		209-2322 1000 ft spool	209-2323 1000 ft spool	209-2317 1000 ft spool	209-2318 1000 ft spool	309-3070/5WH 500 ft pull box	309-3090/5WH 500 ft pull box
		209-2325 500 ft pull box	309-3000/5BK 500 ft pull box	209-2317/PR 1000 ft spool	209-2318/PR 1000 ft spool	309-3071/WH 1000 ft spool	
		309-2080/5BK 500 ft pull box	309-3010/5WH 500 ft pull box	309-3020/5BK 500 ft pull box	309-3040/5BK 500 ft pull box	209-2328 1000 ft pull box	
		309-2090/5BK 500 ft pull box		309-3030/5WH 500 ft pull box	309-3050/5WH 500 ft pull box	209-2328/BK 1000 ft pull box	
				309-3031/WH 500 ft pull box	309-3051/WH 1000 ft spool		
		105 strand					
		209-2325 500 ft pull box	209-2326 500 ft pull box				
			209-2326/WH/WS 500 ft spool				
SHIELDED							
		14/2	14/4	16/2	16/4		
		41 strand		65 strand			
		209-2347/S/5WH 500 ft pull box	209-2351/S/5WH 500 ft pull box	209-2355/S/5WH 500 ft pull box	209-2359/S/5WH 500 ft pull box		
DIRECT BURIAL							
12/2	12/4	14/2	14/4	16/2	16/4	18/2	18/4
65		105		65 strand		16 strand	
209-2324/DB 500 ft spool	209-2319/DB 500 ft spool	209-2320/DB 500 ft pull box	209-2321/DB 500 ft spool	209-2315/DB 500 ft pull box	209-2316/DB 500 ft pull box	209-2328/DB 500 ft pull box	209-2329/DB 500 ft pull box

Check availability: 209-2335/5WH (10 AWG, 2 Conductor, Stranded (105 Strand), PVC Jacket, 500 ft, Spool, White)

Wire thickness is identified by its American Wire Gauge (AWG) number. The lower the gauge number, the thicker the wire. Thicker wire presents less resistance to current flow. Thick wire (12 or 14 gauge) is recommended for long wire runs, high power applications, and low-impedance speakers (4 or 6 ohms). For shorter runs (less than 50 feet) to 8 ohm speakers, 16 gauge wire will usually work fine. It's cost-effective and easy to work with.

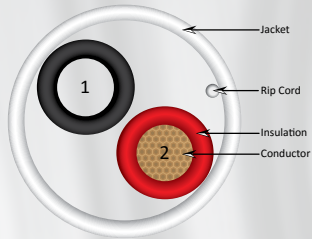


Representation of different conductor sizes, 10 AWG - 28 AWG (not an actual size)

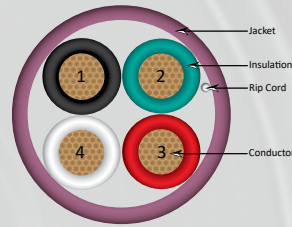
# Audio Cable

## High-Strand Audio Cable | **CMP (Plenum-Rated) CL3P**

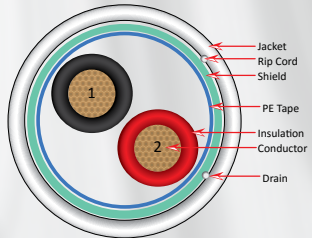
High-Strand Audio Cable - <b>PLENUM-RATED</b>					
UNSHIELDED					
12/2	12/4	14/2	14/4	16/2	16/4
65 strand		41 strand		65 strand	
-	309-2075/P/5WH 500 ft spool	309-2085/P/5BK 500 ft pull box	309-3016/P/5WH 500 ft pull box	309-3025/P/5BK 500 ft pull box	309-3045/P/5BK 500 ft pull box
		309-2086/P/BK 1000 ft spool		309-3026/P/BK 500 ft pull box	309-3046/P/BK 1000 ft pull box
		309-2095/P/5WH 500 ft pull box		309-3035/P/5WH 500 ft pull box	309-3055/P/5WH 500 ft pull box
		309-2096/P/WH 1000 ft spool		309-3036/P/WH 1000 ft pull box	309-3056/P/WH 1000 ft pull box
SHIELDED					
-	-	-	-	16/2	16/4
				65 strand	
				309-3038/SP/5WH 500 ft pull box	-



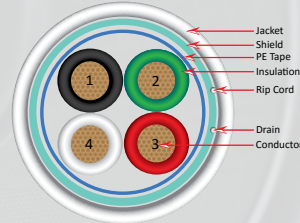
2 conductors, unshielded



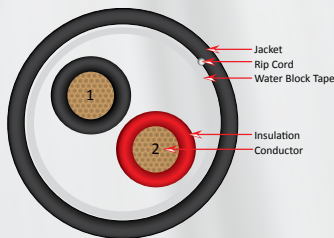
4 conductors, unshielded



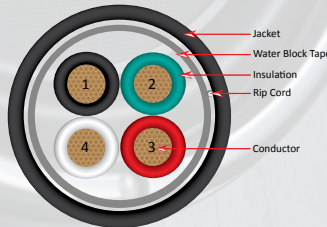
2 conductors, shielded



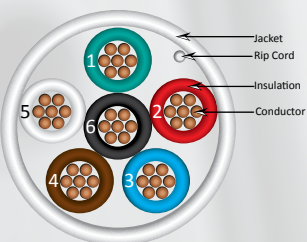
4 conductors, shielded



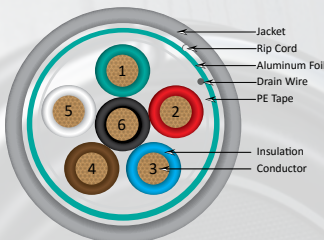
2 conductors, direct burial



4 conductors, direct burial



6 conductors, unshielded



6 conductors, shielded





## Audio/Security Cable | CMR (Riser-Rated) CL3R

### Audio/Security Cable - CL3R RISER

#### UNSHIELDED

18/2	18/4	18/6	22/2	22/4
	7 strand		7 strand	
309-3060/5BK 500 ft pull box	309-3080/5BK 500 ft pull box	-	-	309-3167/WH 1000 ft pull box
309-3061/BK 1000 ft pull box	309-3084/BK 1000 ft pull box			
309-3070/5WH 500 ft pull box	309-3081/5GY 500 ft pull box			
309-3071/WH 1000 ft pull box	309-3083/GY 1000 ft pull box			
309-3072/GY 1000 ft pull box	309-3082/5WH 500 ft pull box			
	309-3090/5WH 1000 ft pull box			

#### SHIELDED

309-3073/S/GY 1000 ft pull box	309-3087/S/5GY 500 ft pull box	309-3100/S/5GY 500 ft spool	309-3164/S/GY 1000 ft pull box	309-3165/S/WH 1000 ft pull box
309-3074/S/WH 1000 ft pull box	309-3088/S/5WH 500 ft pull box	309-3120/S/GY 1000 ft spool		
	309-3091/S/WH 1000 ft pull box			



Also available in Black & White

## Audio Cable Now in Purple

CL3, CMR (Riser Rated)  
Hi Strand | Bare Copper  
14, 16 AWG | 2, 4 Conductors



### Part Number Anatomy:

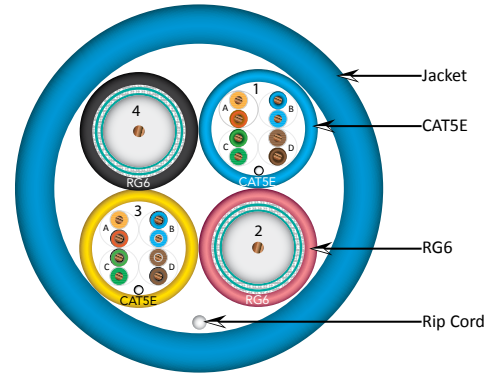
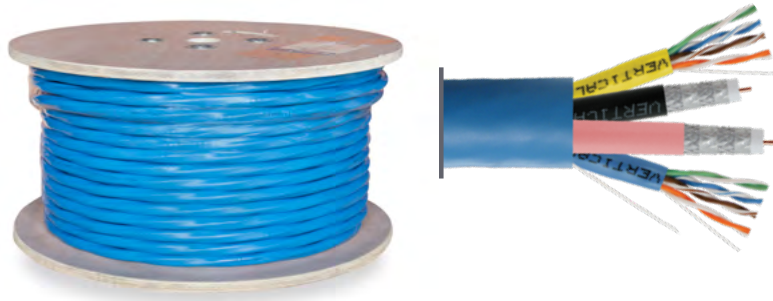
309 Series - Made in the USA  
209 Series - Made in China  
XXX-XXXX/XX - 1000 ft  
XXX-XXXX/5XX - 500 ft  
XXX-XXXX/BK - Black, /PR - Purple,  
/WH - White, /GY - Gray

[More Security Cables](#)

P136

XXX-XXXX/P/XX - Plenum-Rated  
XXX-XXXX/DB - Direct Burial  
XXX-XXXX/S/XX - Shielded  
XXX-XXXX/SP/XX - Shielded Plenum-Rated

# Bundled Cable: 2xRG6 Quad Shield CCS with 2xCAT5E



### Features:

- CMR-Rated
- ETL-Verified, RoHS Compliant
- Supplied in 500 ft Spool
- **CAT5E UTP Cable**
  - High-Performance Data Cable
  - 350 MHz Bandwidth for Data Applications
  - 24 AWG Solid Bare Copper Conductors
  - ANSI/TIA 568C.2, ISO/IEC-11801
- **RG6 Coaxial Cable**
  - High-Grade RG6 Quad Shield
  - Suitable for Digital HDTV, CATV

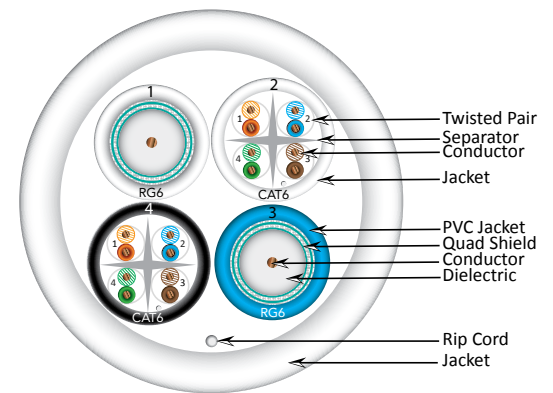
Item #	Description
--------	-------------

294-2170	2 x RG6 (CCS) Quad Shield with 2 x CAT5E, 350 MHz, 24 AWG, UTP, Solid, PVC Jacket, 500 ft, Wooden Spool, Blue
----------	---



MULTIMEDIA SYSTEMS

# Bundled Cable: 2x RG6 Quad Shield CCS with 2x CAT6



### Features:

- CMR-Rated
- ETL-Verified, RoHS Compliant
- 500 ft Wooden Spool
- **CAT6 UTP Cable**
  - High-Performance Data Cable
  - 550 MHz Bandwidth for Data Applications
  - 23 AWG Solid Bare Copper Conductors
  - ANSI/TIA 568C.2, ISO/IEC-11801
- **RG6 Coaxial Cable**
  - High-Grade RG6 Quad Shield
  - Suitable for Digital HDTV, CATV

Item #	Description
--------	-------------

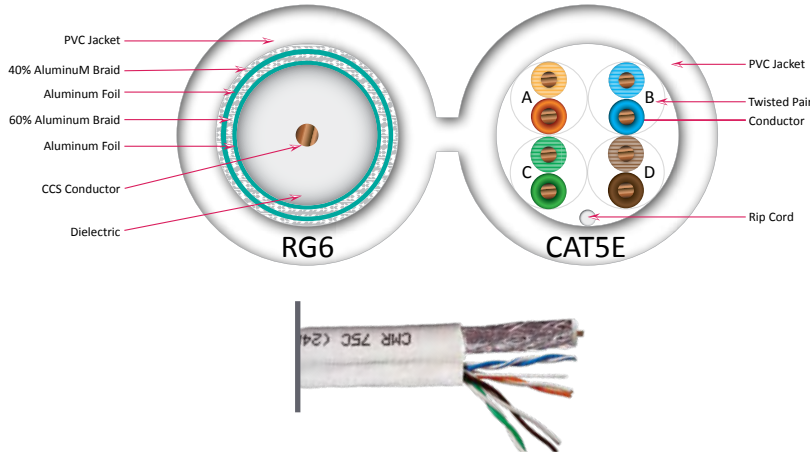
294-2171	2 x RG6 (CCS) Quad Shield with 2 x CAT6 550 MHz 23 AWG (UTP) White
----------	--



## Bundled Cable

▶ RG6 + CAT5E

# Bundled Cable: RG6 Quad Shield CCS with CAT5E



### Features:

- **CAT5E Unshielded Twisted Pair (UTP) Cable**
- High-Performance CAT5E Data Communications Cable
- Designed for Indoor Installations, CMR-Rated Jacket
- 4-Pair – Easily Identified Color-Striped Pairs
- 24 AWG Solid Bare Copper Conductors
- Exceeds ANSI/TIA 568C.2, ISO/IEC 11801 specifications
- **High-Grade RG6 Quad Shield Coaxial Cable**
- 18 AWG Solid Copper-Clad Steel
- 500 ft Wooden Spool
- ETL, RoHS Compliant

### Item #

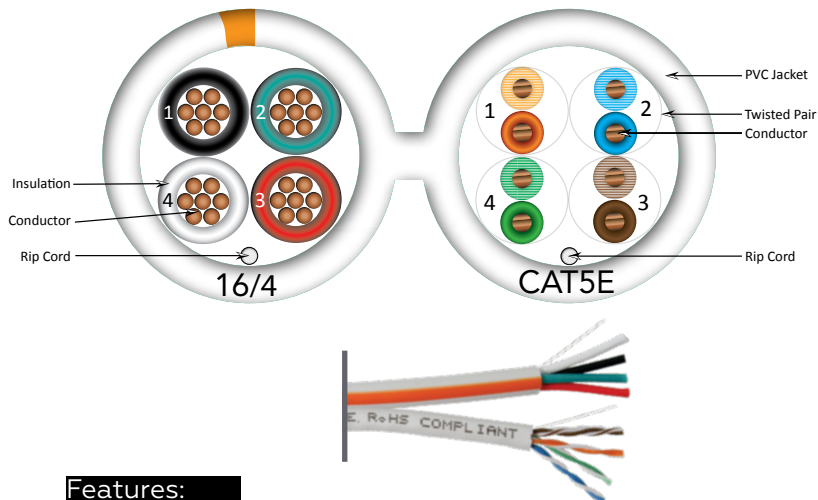
294-2172

### Description

1 x RG6 (CCS) Quad Shield with 1 x CAT5E, 350 MHz, 24 AWG, UTP, Solid, PVC Jacket, 500 ft Wooden Spool, White



# Bundled Cable: CAT5E with 16/4 Audio (CMR)



### Features:

- **CAT5E Unshielded Twisted Pair (UTP) Cable**
- High-Performance CAT5E Data Communications Cable
- Suitable for 350 MHz High-Speed Data Applications, Gigabit Ethernet, Fast Ethernet and 155Mbps TP-PMD/CDDI
- Designed for Indoor Installations, CMR-Rated Jacket
- 4-Pair – Easily Identified Color-Striped Pairs
- **16 AWG 4 Conductor Speaker Cable**
- ETL-listed, RoHS Compliant
- Supplied in 500 ft Wooden Spool

### Item #

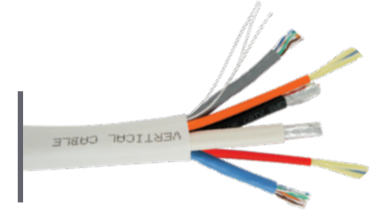
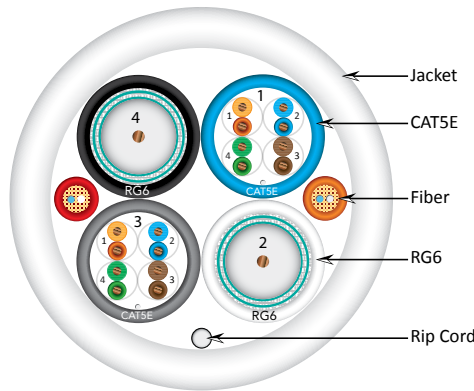
294-2173

### Description

Bundled Cable, 1 x 350 MHz CAT5E (UTP) with 4C x 16 AWG, PVC Jacket, 500 ft, Wooden Spool, White



# Bundled Cable: 2x RG6 Quad Shield CCS, 2x CAT5E, 2x Multi-Fiber



## Features:

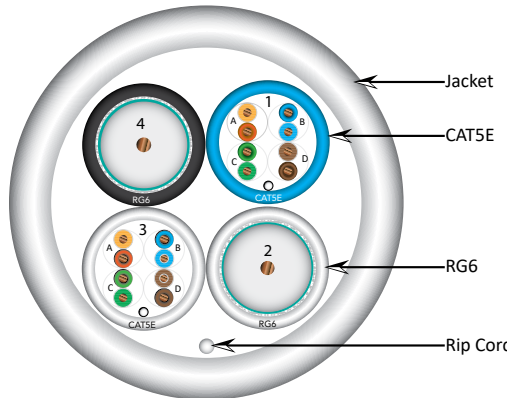
- **CAT5E Unshielded Twisted Pair (UTP) Cable**
- High-Performance CAT5E Data Communications Cable
- Suitable for 350 MHz High-Speed Data Applications, Gigabit Ethernet, Fast Ethernet and 155Mbps TP-PMD/CDDI
- Designed for Indoor Installations, (CMR) Riser
- 4-Pair – Easily Identified Color-Striped Pairs
- Exceeds ANSI/TIA 568C.2, ISO/IEC 11801 specifications
- 24 AWG Solid Bare Copper Conductors
- **High-Grade RG6 Quad Shield Coaxial Cable**
- Suitable for Digital HDTV Applications, CATV, Outdoor TV Antennas and Digital Satellite Installations
- 18 AWG Solid Copper-Clad Steel
- Sweep-Tested to 3.0 GHz
- **Multimode Fiber (2 Cores)**
- ETL-listed, RoHS Compliant
- 500 ft Wooden Spool

Item #	Description
294-2174	Bundled Cable, 2 x RG6 (CCS) Quad Shield with 2 x 350 MHz CAT5E (UTP) 2X Multi-Fiber, 500 ft Wooden Spool, White



MULTIMEDIA SYSTEMS

# Bundled Cable: 2x RG6 Standard Shield CCS with 2x CAT5E



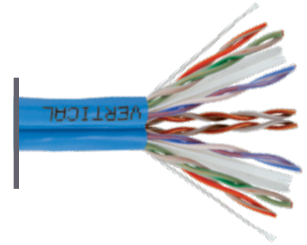
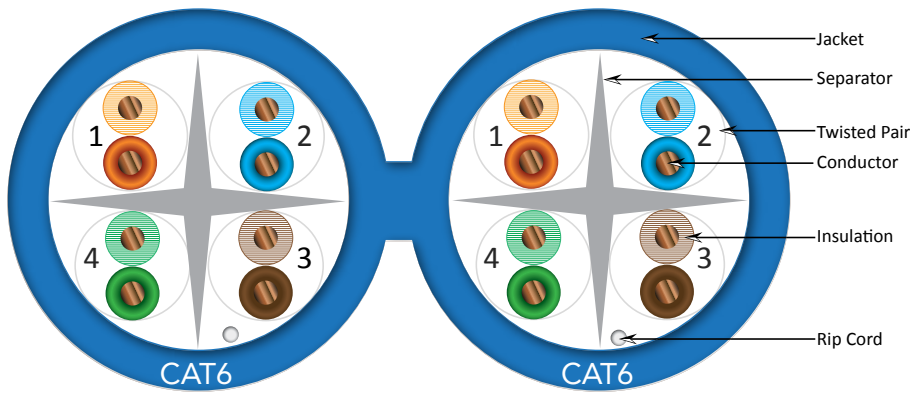
## Features:

- **CAT5E Unshielded Twisted Pair (UTP) Cable**
- High-Performance CAT5E Data Communications Cable
- Suitable for 350 MHz High-Speed Data Applications, Gigabit Ethernet, Fast Ethernet and 155Mbps TP-PMD/CDDI
- Designed for Indoor Installations, (CMR) Riser
- 4-Pair – Easily Identified Color-Striped Pairs
- Exceeds ANSI/TIA 568C.2, ISO/IEC 11801 specifications
- 24 AWG Solid Bare Copper Conductors
- **High-Grade RG6 Standard Shield Coaxial Cable**
- Suitable for Digital HDTV Applications, CATV
- 18 AWG Solid Copper-Clad Steel
- Sweep-Tested to 3.0 GHz

Item #	Description
294-2182	Bundled Cable, 2 x RG6 (CCS) Quad Shield with 2 x 350 MHz CAT5E (UTP), 500 ft Wooden Spool, White



# Bundled Cable: 2x CAT6 Siamese Style



### Features:

- High-Performance Data Cable
- 550 MHz Bandwidth for Data Applications
- CAT6 Unshielded Twisted Pair
- 23 AWG Solid Copper Conductors
- Easily Identified Color-Striped Pairs
- Exceeds ANSI/TIA 568C.2, ISO/IEC 11801
- Riser-Rated PVC Jacket, CMR
- ETL-listed, RoHS Compliant
- 1000 ft Wooden Spool



Item #	Description
294-2176	CAT6 Dual, Siamese Style, 23 AWG, UTP, 8C Solid Bare Copper, CMR-Rated, PVC Jacket, 1000 ft, Blue

Access control, CCTV cameras, audio, and data applications - all at once.

Type / Category	CAT5E	2*CAT5E	CAT6	2*CAT6	2*CAT5E + 2*Multi-Fiber	RG59
16/4 Audio	<b>294-2173</b>					
18/2 Power Siamese						<b>107-2180/WH</b> (Check more in Coax section)
CAT6	<b>294-2176</b>					
2*RG6 Standard Shield	<b>294-2182</b>					
RG6 Quad Shield	<b>294-2172</b>	<b>294-2179</b>				
2*RG6 Quad Shield	<b>294-2170</b>		<b>294-2171</b>	<b>294-2174</b>		

MULTIMEDIA SYSTEMS



# **SECURITY and FLS SYSTEMS**


# Fire Alarm Cable

## Fire Alarm Cable - PLENUM-RATED



FIRE ALARM CABLE - PLENUM-RATED				
UNSHIELDED				
12/2	14/2	16/2	16/4	18/2
315-122/P/RD 1000 ft spool	315-142/P/YL 315-142/P/RD 315-142/P/BL 1000 ft spool	315-162/P/WH 315-162/P/YL 315-162/P/RD 315-162/P/BL 1000 ft spool		211-182/P/WH 500 ft pull box 211-182/P/5WH 1000 ft pull box
SHIELDED				
		16/2	16/4	18/2
		315-162/S/P/YL 315-162/S/P/RD 315-162/S/P/BL 1000 ft spool 211-162/S/P/5WH 500 ft pull box 211-162/S/P/WH 1000 ft pull box	211-164/S/P/5WH 500 ft pull box 211-164/S/P/WH 1000 ft pull box	211-182/S/P/5WH 500 ft pull box 211-182/S/P/WH 1000 ft pull box

## Fire Alarm Cable - RISER-RATED

FIRE ALARM CABLE - RISER-RATED				
UNSHIELDED				
12/2	16/2	16/4	18/2	18/4
315-122/R/RD 1000 ft spool	315-162/R/YL 315-162/R/RD 315-162/R/BL 1000 ft spool	315-164/R/RD 315-164/S/R/RD 1000 ft spool	315-182/R/YL 315-182/R/RD 315-182/R/BL 1000 ft spool	315-184/R/RD 1000 ft spool
SHIELDED				
			18/2	18/4
			315-182/S/R/YL 315-182/S/R/RD 315-182/S/R/BL 1000 ft spool	315-184/S/R/RD 1000 ft spool



IMPORTED PRODUCT

Item #	Description
315-224/R/5RD	22/4 Alarm Cable, FPLR, Unshielded, Solid Bare Copper Conductors, 500 ft, Spool, Red
315-224/R/5RDCP	22/4 Alarm Cable, FPLR, Unshielded, Solid Bare Copper Conductors, 500 ft, Coil Pack, Red

### Part Number Anatomy:

XXX-XXX/XX - 1000 ft  
XXX-XXX/5XX - 500 ft

XXX-162/X/XX - 16 AWG 2 Conductor  
XXX-184/X/XX - 18 AWG 4 Conductor

XXX-XXX/RD - Red color  
XXX-XXX/YL - Yellow color  
XXX-XXX/WH - White color  
XXX-XXX/BL - Blue color

XXX-XXX/P/XX - Plenum-Rated  
XXX-XXX/R/XX - Riser-Rated

XXX-XXX/S/X/XX - Shielded

# Fire Alarm Cable

## FPLR, RISER-RATED

**MADE IN USA**

### UNSHIELDED

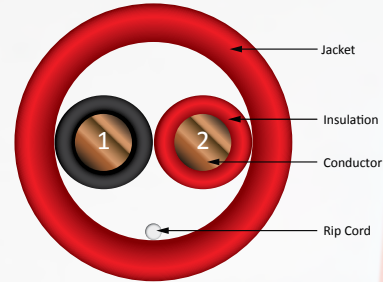
Item #	Description
315-142/R/BL	14/2 Alarm Cable, FPLR, Unshielded, Solid Bare Copper Conductors, 1000 ft, Spool, Blue
315-142/R/RD	14/2 Alarm Cable, FPLR, Unshielded, Solid Bare Copper Conductors, 1000 ft, Spool, Red
315-142/R/YL	14/2 Alarm Cable, FPLR, Unshielded, Solid Bare Copper Conductors, 1000 ft, Spool, Yellow
315-162/R/BL	16/2 Alarm Cable, FPLR, Unshielded, Solid Bare Copper Conductors, 1000 ft, Spool, BL
315-162/R/RD	16/2 Alarm Cable, FPLR, Unshielded, Solid Bare Copper Conductors, 1000 ft, Spool, Red
315-162/R/YL	16/2 Alarm Cable, FPLR, Unshielded, Solid Bare Copper Conductors, 1000 ft, Spool, YL
315-164/R/RD	16/4 Alarm Cable, FPLR, Unshielded, Solid Bare Copper Conductors, 1000 ft, Spool, Red
315-182/R/BL	18/2 Alarm Cable, FPLR, Unshielded, Solid Bare Copper Conductors, 1000 ft, Spool, Blue
315-182/R/RD	18/2 Alarm Cable, FPLR, Unshielded, Solid Bare Copper Conductors, 1000 ft, Spool, Red
315-182/R/YL	18/2 Alarm Cable, FPLR, Unshielded, Solid Bare Copper Conductors, 1000 ft, Spool, Yellow
315-184/R/RD	18/4 Alarm Cable, FPLR, Unshielded, Solid Bare Copper Conductors, 1000 ft, Spool, Red

### SHIELDED

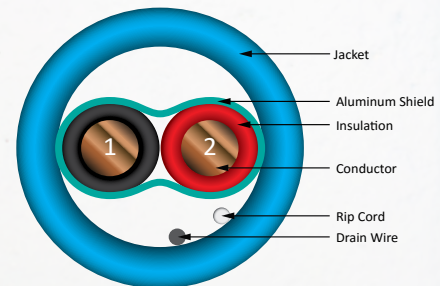
Item #	Description
315-164/S/R/RD	16/4 Alarm Cable, FPLR, Shielded, Solid Bare Copper Conductors, 1000 ft, Spool, Red
315-182/S/R/BL	18/2 Alarm Cable, FPLR, Shielded, Solid Bare Copper Conductors, 1000 ft, Spool, Blue
315-182/S/R/GR	18/2 Alarm Cable, FPLR, Shielded, Solid Bare Copper Conductors, 1000 ft, Spool, Green
315-182/S/R/RD	18/2 Alarm Cable, FPLR, Shielded, Solid Bare Copper Conductors, 1000 ft, Spool, Red
315-184/S/R/RD	18/4 Alarm Cable, FPLR, Shielded, Solid Bare Copper Conductors, 1000 ft, Spool, Red



2 Conductor Unshielded



2 Conductor Shielded



#### Features:

- FPLR Fire Alarm Cable
- Riser-Rated
- Fire protective signal circuit
- Solid Bare Copper Conductors
- ETL-listed, RoHS Compliant
- Made in USA



Applications: Smoke alarms and detectors, pull boxes, burglar alarms, addressable fire alarm systems





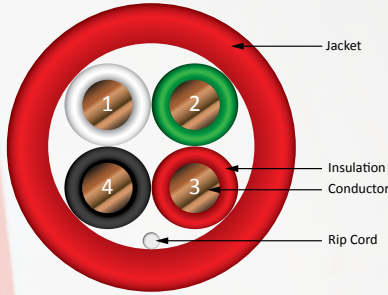
# Fire Alarm Cable

## FPLP, PLENUM-RATED

**MADE IN USA**



4 Conductor  
Unshielded



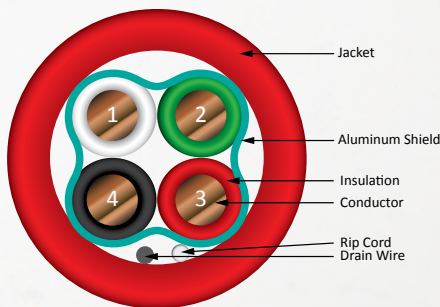
Jacket

Insulation  
Conductor

Rip Cord



4 Conductor  
Shielded



Jacket

Aluminum Shield

Insulation  
Conductor

Rip Cord  
Drain Wire

### Features:

- FPLP Fire Alarm Cable
- Plenum-Rated
- Fire protective signal circuit
- Solid Bare Copper Conductors
- ETL-listed, RoHS Compliant
- Made in USA

Applications: Smoke alarms and detectors, pull boxes, burglar alarms, addressable fire alarm systems



### UNSHIELDED

Item #	Description
315-122/P/RD	12/2 Alarm Cable, FPLP, Unshielded, Solid Bare Copper Conductors, 1000 ft, Spool, Red
315-142/P/BL	14/2 Alarm Cable, FPLP, Unshielded, Solid Bare Copper Conductors, 1000 ft, Spool, Blue
315-142/P/RD	14/2 Alarm Cable, FPLP, Unshielded, Solid Bare Copper Conductors, 1000 ft, Spool, Red
315-142/P/YL	14/2 Alarm Cable, FPLP, Unshielded, Solid Bare Copper Conductors, 1000 ft, Spool, Yellow
315-144/P/RD	14/4 Alarm Cable, FPLP, Unshielded, Solid Bare Copper Conductors, 1000 ft, Spool, Red
315-162/P/BL	16/2 Alarm Cable, FPLP, Unshielded, Solid Bare Copper Conductors, 1000 ft, Spool, Blue
315-162/P/RD	16/2 Alarm Cable, FPLP, Unshielded, Solid Bare Copper Conductors, 1000 ft, Spool, Red
315-162/P/WH	16/2 Alarm Cable, FPLP, Unshielded, Solid Bare Copper Conductors, 1000 ft, Spool, White
315-162/P/YL	16/2 Alarm Cable, FPLP, Unshielded, Solid Bare Copper Conductors, 1000 ft, Spool, Yellow
315-164/P/RD	16/4 Alarm Cable, FPLP, Unshielded, Solid Bare Copper Conductors, 1000 ft, Spool, Red
315-182/P/RD	18/2 Alarm Cable, FPLP, Unshielded, Solid Bare Copper Conductors, 1000 ft, Spool, Blue
315-182/P/BL	18/2 Alarm Cable, FPLP, Unshielded, Solid Bare Copper Conductors, 1000 ft, Spool, Red
315-182/P/WH	18/2 Alarm Cable, FPLP, Unshielded, Solid Bare Copper Conductors, 1000 ft, Spool, White
315-182/P/YL	18/2 Alarm Cable, FPLP, Unshielded, Solid Bare Copper Conductors, 1000 ft, Spool, Yellow
315-184/P/RD	18/4 Alarm Cable, FPLP, Unshielded, Solid Bare Copper Conductors, 1000 ft, Spool, Red

### SHIELDED

Item #	Description
315-162/S/P/BL	16/2 Alarm Cable, FPLP, Shielded, Solid Bare Copper Conductors, 1000 ft, Spool, Blue
315-162/S/P/RD	16/2 Alarm Cable, FPLP, Shielded, Solid Bare Copper Conductors, 1000 ft, Spool, Red
315-162/S/P/YL	16/2 Alarm Cable, FPLP, Shielded, Solid Bare Copper Conductors, 1000 ft, Spool, Yellow
315-182/S/P/BL	18/2 Alarm Cable, FPLP, Shielded, Solid Bare Copper Conductors, 1000 ft, Spool, Blue
315-182/S/P/RD	18/2 Alarm Cable, FPLP, Shielded, Solid Bare Copper Conductors, 1000 ft, Spool, Red
315-182/S/P/YL	18/2 Alarm Cable, FPLP, Shielded, Solid Bare Copper Conductors, 1000 ft, Spool, Yellow

- **Multiple colors (Custom colors available)**
- **FPLR & FPLP**
- **Made in the USA**
- **Wooden & Plastic Spools**
- **Short lengths available**

SECURITY AND FLS SYSTEMS

# Security Cable - **PLENUM-RATED**

SECURITY AND FLS SYSTEMS

SECURITY CABLE - <b>PLENUM-RATED</b>						
UNSHIELDED - STRANDED						
12/2	12/4	14/2	14/4	16/2	16/4	18/2
19 strand		19 strand		19 strand		7 strand
211-122/P/WH 1000 ft spool 211-122/P/5WH 500 ft pull box	211-124/P/5WH 500 ft spool	211-142/P/WH 1000 ft pull box 211-142/P/5WH 500 ft pull box	211-144/P/WH 1000 ft spool 211-144/P/5WH 500 ft pull box	211-162/P/WH 211-162/P/BK 1000 ft pull box 211-162/P/5WH 211-162/P/5BK 500 ft pull box	211-164/P/WH 1000 ft pull box 211-164/P/5WH 211-164/P/5BK 500 ft pull box	211-182/P/WH 1000 ft pull box 211-182/P/5WH 500 ft pull box
SHIELDED - STRANDED						
		14/2	14/4	16/2	16/4	18/2
		19 strand		19 strand		7 strand
			211-144/S/P/WH 1000 ft spool 211-144/S/P/5WH 500 ft spool	211-162/S/P/WH 1000 ft pull box 211-162/S/P/5WH 500 ft pull box	211-164/S/P/WH 1000 ft spool 211-164/S/P/5WH 500 ft pull box	211-182/S/P/WH 1000 ft pull box 211-182/S/P/5WH 500 ft pull box

# Security Cable - **NON-PLENUM**

SECURITY CABLE - <b>NON-PLENUM</b>						
UNSHIELDED - STRANDED						
14/2	14/4	18/2	18/3	18/4	18/6	18/8
19 strand		19 strand			7 strand	
211-142ST/5WH 500 ft pull box	211-144ST/5WH 500 ft pull box	211-182ST/WH 211-182ST/GY 1000 ft pull box 211-182ST/5WH 211-182ST/5GY 500 ft pull box	211-183ST/WH 211-183ST/GY 1000 ft pull box 211-183ST/5BK 211-183ST/5WH 211-183ST/5GY 500 ft pull box	211-184ST/WH 211-184ST/GY 1000 ft pull box 211-184ST/5WH 211-184ST/5GY 211-184/S/GY 500 ft pull box	211-186ST/GY 1000 ft spool	211-188ST/GY 1000 ft spool
SHIELDED - STRANDED						
		18/2	18/3	18/4	18/6	18/8
		19 strand			7 strand	
		211-182ST/S/WH 211-182ST/S/GY 1000 ft pull box 211-182ST/S/5WH 211-182ST/S/5GY 500 ft pull box	211-183ST/S/WH 211-183ST/S/GY 1000 ft pull box 211-183ST/S/5WH 211-183ST/S/5GY 500 ft pull box	211-184ST/S/WH 211-184ST/S/GY 1000 ft pull box 211-184ST/S/5WH 211-184ST/S/5GY 500 ft pull box	211-186ST/S/GY 1000 ft spool 211-186ST/S/5GY 500 ft spool	211-188ST/S/GY 1000 ft spool

## Part Number Anatomy:

XXX-XXX/XX - 1000 ft  
XXX-XXX/5XX - 500 ft

XXX-222XX/XX - 22 AWG 2 Conductor  
XXX-183XX/XX - 18 AWG 3 Conductor

XXX-XXXSO/XX - Solid Conductor  
XXX-XXXST/XX - Stranded Conductor

XXX-XXXXX/S/XX - Shielded  
XXX-XXX/P/XX - Plenum-Rated

# SECURE SMARTER with Vertical Cable

SECURITY CABLE - <b>PLENUM-RATED</b>						
UNSHIELDED - STRANDED						
18/4	18/6	18/8	22/2	22/4	22/6	22/8
19 strand	7 strand		7 strand			
211-184/P/WH 1000 ft pull box 211-184/P/5WH 500 ft pull box	211-186ST/P/WH 1000 ft spool 211-186ST/P/5WH 500 ft spool		210-222/P/WH 1000 ft pull box	210-224/P/WH 1000 ft pull box	210-226/P/WH 1000 ft spool	210-228/P/WH 1000 ft spool
SHIELDED - STRANDED						
18/4	18/6	18/8	22/2	22/4	22/6	22/8
19 strand	7 strand		7 strand			
211-184/S/P/5WH 1000 ft pull box 211-184/S/P/WH 500 ft pull box	211-186/S/P/WH 1000 ft spool	211-188/S/P/WH 1000 ft spool	210-222/P/WH 1000 ft spool	210-224/S/P/WH 1000 ft spool	210-226/S/P/WH 1000 ft spool	

SECURITY CABLE - <b>NON-PLENUM</b>					
UNSHIELDED - STRANDED				UNSHIELDED - SOLID	
22/2	22/4	22/6	22/8	22/2	22/4
7 strand				SOLID CONDUCTOR	
210-222ST/GY 210-222ST/WH 211-222ST/GY 211-222ST/WH 1000 ft pull box 211-222ST/5WH 500 ft pull box 212-222ST/5GY 212-222ST/5WH 500 ft coil pack	210-224ST/GY 210-224ST/WH 211-224ST/GY 211-224ST/WH 1000 ft pull box 210-224ST/5GY 210-224ST/5WH 500 ft pull box 212-224ST/5GY 212-224ST/5WH 500 ft coil pack	210-226ST/GY 210-226ST/WH 211-226ST/GY 211-226ST/WH 1000 ft pull box 210-226ST/5GY 210-226ST/5WH 211-226ST/5GY 211-226ST/5WH 500 ft pull box	210-228ST/GY 210-228ST/WH 211-228ST/GY 211-228ST/WH 1000 ft pull box 210-228ST/5GY 210-228ST/5WH 211-228ST/5GY 211-228ST/5WH 500 ft pull box	211-222SO/GY 211-222SO/WH 1000 ft pull box 211-222SO/5GY 211-222SO/5WH 212-222SO/5GY 212-222SO/5WH 500 ft pull box	210-224P/WH 210-224SO/GY 210-224SO/WH 211-224SO/GY 211-224SO/WH 1000 ft pull box 210-224SO/5WH 211-224SO/5GY 211-224SO/5WH 212-224SO/5GY 212-224SO/5WH 212-224ST/5GY 212-224ST/5WH 500 ft pull box
SHIELDED - STRANDED				SHIELDED - SOLID	
22/2	22/4	22/6	22/8	22/2	22/4
7 strand				SOLID CONDUCTOR	
210-222ST/S/GY 210-222ST/S/WH 211-222ST/S/GY 211-222ST/S/WH 1000 ft pull box 210-222ST/S/5GY 210-222ST/S/5WH 211-222ST/S/5GY 211-222ST/S/5WH 500 ft pull box	210-224S/WH 211-224ST/S/GY 211-224ST/S/WH 1000 ft pull box 210-224ST/S/5GY 210-224ST/S/5WH 211-224ST/S/5GY 211-224ST/S/5WH 500 ft pull box	210-226ST/S/WH 210-226ST/S/GY 211-226ST/S/WH 211-226ST/S/GY 1000 ft pull box 210-226ST/S/5GY 210-226ST/S/5WH 211-226ST/S/5GY 211-226ST/S/5WH 500 ft pull box	210-228ST/S/GY 210-228ST/S/WH 211-228ST/S/GY 211-228ST/S/WH 1000 ft pull box 210-228ST/S/5GY 210-228ST/S/5WH 211-228ST/S/5GY 211-228ST/S/5WH 500 ft pull box	211-222SO/S/GY 211-222SO/S/WH 1000 ft pull box 211-222SO/S/5GY 211-222SO/S/5WH 500 ft pull box	210-224SO/S/GY 211-224SO/S/GY 210-224SO/S/WH 1000 ft pull box 210-224SO/S/5GY 210-224SO/S/5WH 211-224SO/S/5GY 211-224SO/S/5WH 500 ft pull box

More Security Cables | P132

# Security Cable

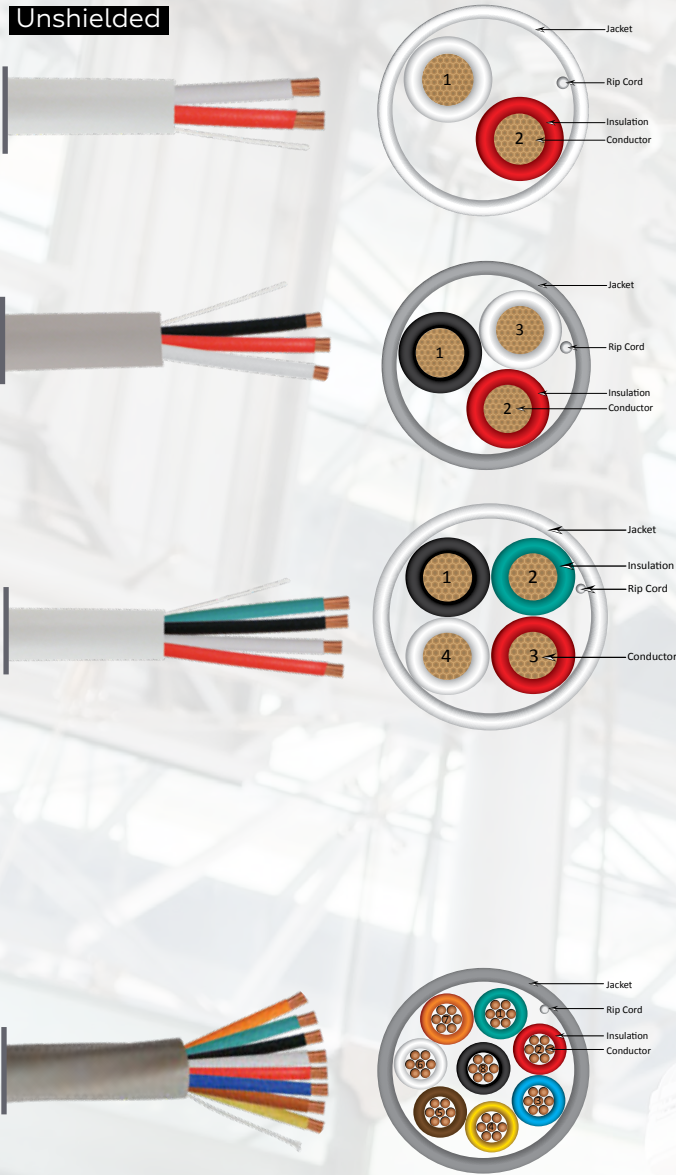
## Security & Communications Cable (Non-Plenum)

SECURITY AND FLS SYSTEMS

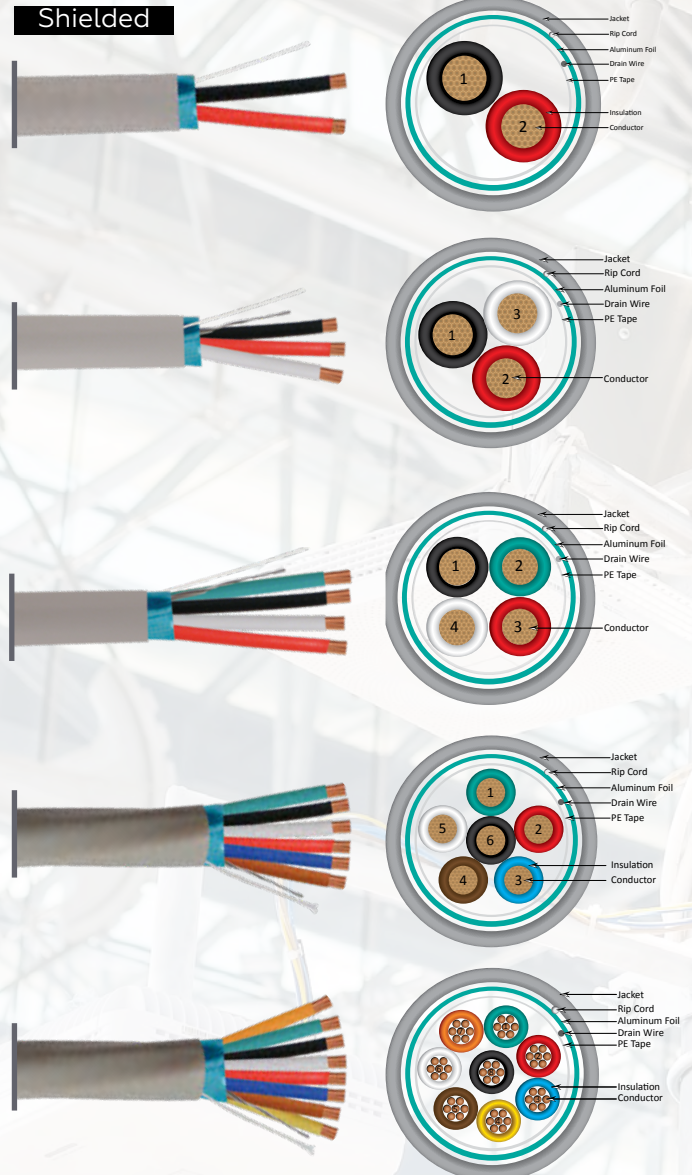


### STRANDED CONDUCTORS

Unshielded



Shielded

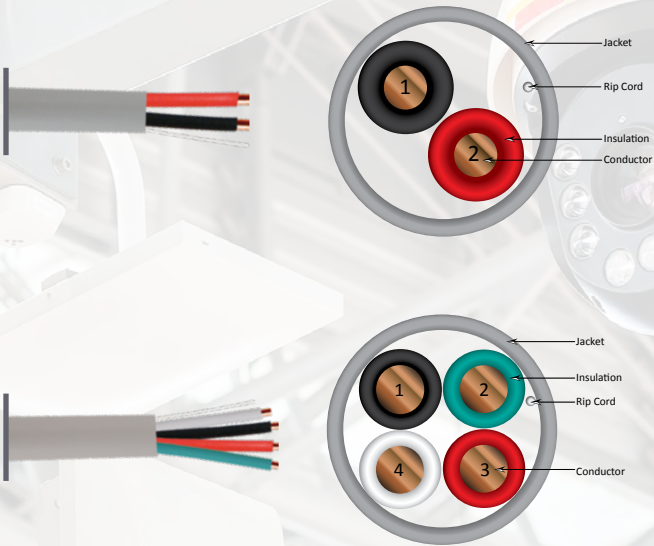


# Secure Smarter with Vertical Cable

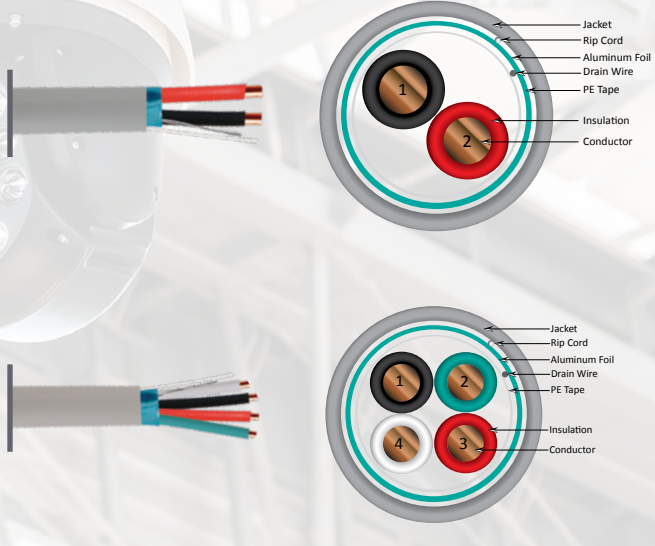


## SOLID CONDUCTORS

### Unshielded



### Shielded



### Features:

- Conductor: Stranded Bare Copper and Solid Bare Copper
- Stranded Conductors Provide Additional Flexibility
- Insulation Material: PVC
- Jacket: PVC
- Sequential Length Markings on Jacket
- 500 ft or 1000 ft (Pull Box, Spool or Coil Pack)
- ETL-listed, RoHS Compliant

### Applications:

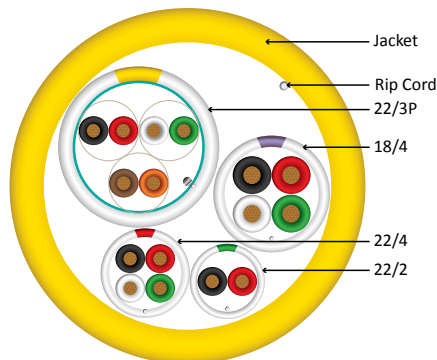
- Indoor Remote Control of Security
- Intercom Systems
- Sound / Audio Systems
- Door Controllers, Prox Sensors, Key Pads, Access Control, Smoke Detectors
- Indoor Applications



SECURITY AND FL...

## Security and Communication Cable ▶ Access Control Cable

### 22/3 Pair (Shielded) + 18/4 + 22/4 + 22/2 Available in CMR & CMP



**RISER**



**PLENUM**

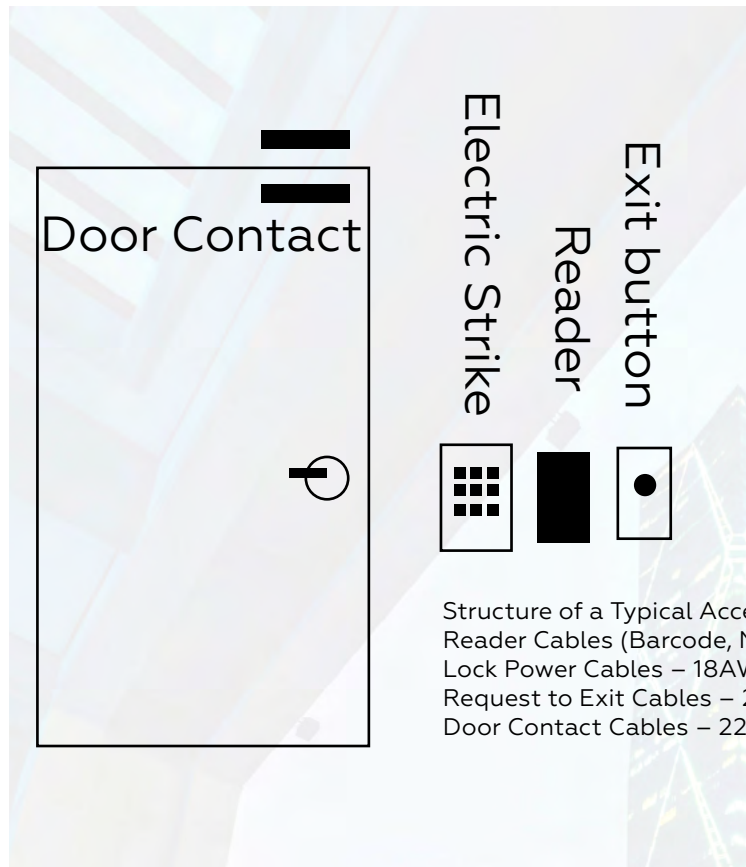
Item #	Description
214-2325/GR	22/3P Shielded + 18/4 + 22/4 + 22/2 Lighting Control Cable Riser-Rated, 500 ft, Green
214-2329/P/YL	22/3P Shielded + 18/4 + 22/4 + 22/2 Lighting Control Cable <b>Plenum-Rated</b> , 500 ft, Yellow

#### Features:

- 4 Component Lighting Control Cable
- Each component contains a rip cord
- Overall PVC Riser-Rated Jacket
- ETL-listed, RoHs Compliant
- 500 ft Spool

Contains: 22 AWG/3 Pair Shielded  
18 AWG / 4 Conductor,  
22 AWG / 4 Conductor,  
22 AWG / 2 Conductor

Applications Include:  
Access Control Panels, Security Panels, Card Readers, Sensors, Keypads,  
Power, Microphones, Speakers, Alarm Systems



Structure of a Typical Access Control Cable:  
Reader Cables (Barcode, Magnetic Strip) – 22AWG / 3 or 6 Pairs  
Lock Power Cables – 18AWG / 4 Pairs  
Request to Exit Cables – 22AWG / 4 Pairs  
Door Contact Cables – 22AWG / 2 Pairs

# Security and Communication Cable ▶ Control Cable

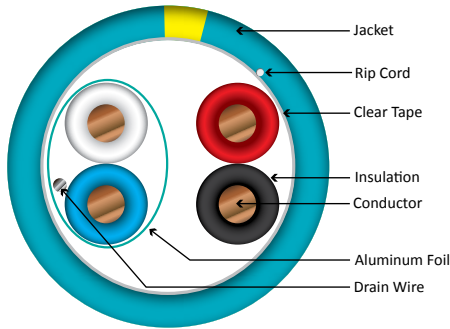
## Control Cable: 22/2 (Shielded) + 18/2, CL3 Rated Available in CMR & CMP



RISER



PLENUM



### Features:

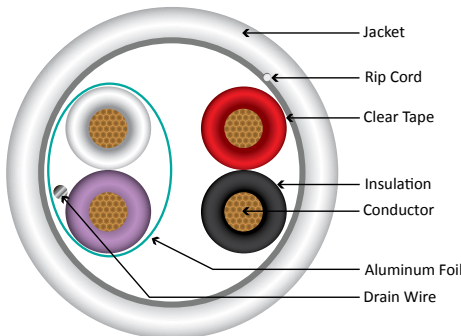
- Control Cable
- Overall PVC Riser-Rated Jacket
- ETL-listed, RoHS Compliant
- 1000 ft Spool

### Applications:

Touch Panels, Key Pads, Expansion Modules, Tuners, Power Limited Control Circuits, Access Control Panels, Security Panels, Card Readers, Sensors, Keypads, Power, Microphones, Speakers, Alarm Systems

Item #	Description
214-2321/TL	22/2 Shielded + 18/2 Stranded Bare Copper Conductors, Riser, 1000 ft, Wooden Spool, Teal with Yellow Stripe
214-2324/P/TL	22/2 Shielded + 18/2 Stranded Bare Copper Conductors, Plenum, 1000 ft, Wooden Spool, Teal with Yellow Stripe

## Control Cable: 22/2 (Shielded) + 16/2, CL3 Rated.



### Features:

- High Grade Lighting Control System Cable
- In-home, commercial, and industrial lighting applications
- Used in conjunction with security & sensor systems
- Indoor Applications
- Riser-Rated for Indoor Use
- Light Dimmers, environmental sensors, smart eco-friendly lighting control
- ETL-listed, RoHS Compliant
- 1000 ft Spool

Item #	Description
214-2323/WH	22/2 Shielded + 16/2 Stranded Bare Copper Conductors, Riser-Rated 1000 ft, Wooden Spool, White

APPLICATIONS: High Grade Lighting Control System Cable In-home, commercial, and industrial lighting applications. Used in conjunction with security & sensor systems Indoor Applications, Light Dimmers, environmental sensors, smart eco-friendly lighting control

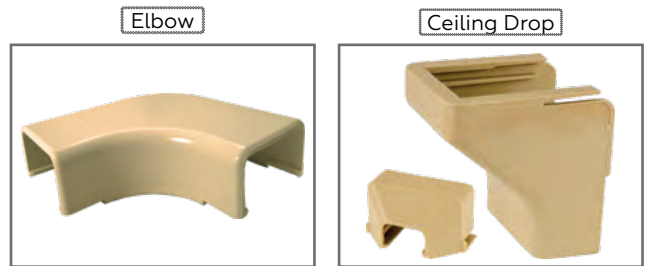
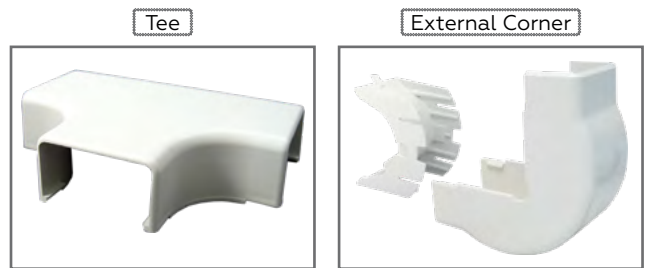
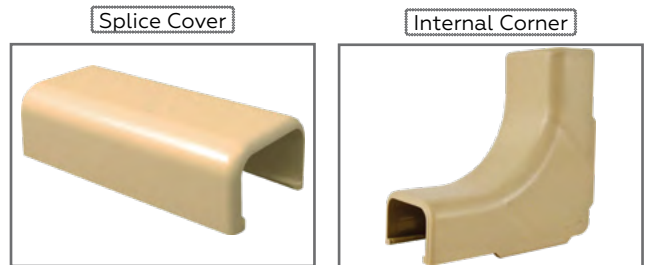
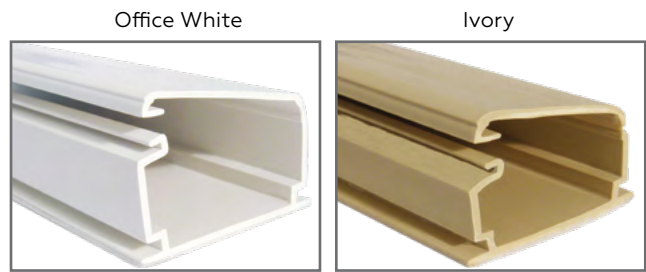


# **CABLING SUPPORT INFRASTRUCTURE**



# Low Voltage Surface Raceways & Accessories

	Item	Office White	Ivory
<b>0.75 in</b>	6 FT Raceway	045-TSR1FW-6A	045-TSR1I-6A
	Splice Cover	045-TSR1FW-14	045-TSR1I-14
	Tee	045-TSR1FW-21-1	045-TSR1I-21-1
	Elbow	045-TSR1FW-25-1	045-TSR1I-25-1
	External Corner	045-TSR1FW-29-1	045-TSR1I-29-1
	Internal Corner	045-TSR1FW-33-1	045-TSR1I-33-1
	End Cap	045-TSR1FW-36	045-TSR1I-36
	Ceiling Drop	045-TSR1FW-50	045-TSR1I-50
<b>1.25 in</b>	6 FT Raceway	045-TSR2FW-6A	045-TSR2I-6A
	Splice Cover	045-TSR2FW-14	045-TSR2I-14
	Tee	045-TSR2FW-21-1	045-TSR2I-21-1
	Elbow	045-TSR2FW-25-1	045-TSR2I-25-1
	External Corner	045-TSR2FW-29-1	045-TSR2I-29-1
	Internal Corner	045-TSR2FW-33-1	045-TSR2I-33-1
	End Cap	045-TSR2FW-36	045-TSR2I-36
	Ceiling Drop	045-TSR2FW-50	045-TSR2I-50
<b>1.75 in</b>	6 FT Raceway	045-TSR3FW-6A	045-TSR3I-6A
	Splice Cover	045-TSR3FW-14	045-TSR3I-14
	Tee	045-TSR3FW-21-1	045-TSR3I-21-1
	Elbow	045-TSR3FW-25-1	045-TSR3I-25-1
	External Corner	045-TSR3FW-29-1	045-TSR3I-29-1
	Internal Corner	045-TSR3FW-33-1	045-TSR3I-33-1
	End Cap	045-TSR3FW-36	045-TSR3I-36
	Ceiling Drop	045-TSR3FW-50	045-TSR3I-50



## Features:

- Tamper resistant, the cover's self-locking, hidden positive latch permits quick re-entry as well as providing a secure installation of premise wire.
- Manufactured of UL 94 V-0 rated PVC material
- Fittings incorporate a minimum 1 in bend radius per ANSI/TIA-568.0 and ANSI/TIA-569.
- Rubber-based foam tape adhesive with high ultimate bond strength conforms to any surface.
- Flexible hinge allows the raceway to endure numerous openings without creating discoloration or stress cracking.
- Junction boxes can be used with this raceway for electrical or data outlets
- Measuring 6 FT in length
- UL-listed

## Accessories:

- Offers same features as raceways
- Available in both Ivory and Office White
- Conform to the TIA cabling standards specifications
- Various sections available
- UL-listed



AVAILABLE IN  
IVORY and  
OFFICE WHITE  
AND THREE SIZES

# Velcro Cable Ties

CABLING SUPPORT INFRASTRUCTURE

Item #	Description
045-V12/75BK	1/2 in Width Velcro Roll, 75 Foot, Black
045-V12/75BL	1/2 in Width Velcro Roll, 75 Foot, Blue
045-V12/75WH	1/2 in Width Velcro Roll, 75 Foot, White
045-V34/75BK	3/4 in Width Velcro Roll, 75 Foot, Black
045-V34/75BL	3/4 in Width Velcro Roll, 75 Foot, Blue
045-V34/75WH	3/4 in Width Velcro Roll, 75 Foot, White



### Features:

- The Double-Sided Velcro Tie Wraps feature full surface-area velcro coverage
- Perfect for mounting, organizing & identification applications
- Reuse and readjust the Velcro Tie Wrap multiple times
- Cut to any length
- Sticky and durable
- 75 FT roll

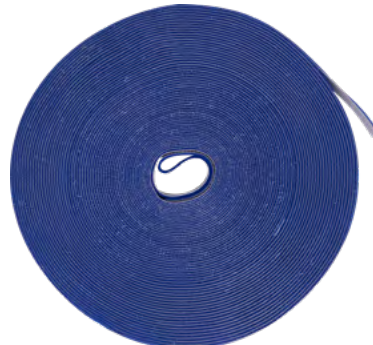
045-V12/75BK



045-V12/75WH



045-V12/75BL



# Standard Cable Ties

Item #	Description
045-CT/50/8BK	8 in Cable Ties, Black
045-CT/50/8NT	8 in Cable Ties, Natural
045-CT/50/12BK	12 in Cable Ties, Black
045-CT/50/12NT	12 in Cable Ties, Natural
045-CT/50/15BK	15 in Cable Ties, Black
045-CT/50/15NT	15 in Cable Ties, Natural
045-CTP/M50/8R	8 in Cable Ties, Red (PLENUM)
045-CTP/M50/12R	12 in Cable Ties, Red (PLENUM)
045-CTP/M50/15R	15 in Cable Ties, Red (PLENUM)



Natural



Black



Red Plenum

### Features:

- 50 lbf tensile rating
- Standard or Plenum
- UL-listed, RoHS Compliant
- 100 per bag



## Velcro Cable Ties

Item #	Description
045-V12/12BK	12 in Velcro Cable Ties, 50 Pack
045-V12/8BK	8 in Velcro Cable Ties, 50 Pack



### Features:

- The Double-Sided Velcro Tie Wraps feature full surface-area velcro coverage
- No clipping is necessary, in contrast to the traditional tie wrap
- Reuse and readjust the Velcro Tie Wrap multiple times
- Perfect for mounting, organizing & identification applications
- Sticks well and durable
- 50 strips per bag



045-V12/8BK



045-V12/12BK

## Mounting Bases

Item #	Description
045-MB/A/11/BK	Adhesive Mounting Base, 100 Pack, for 18 to 50 lb Cable Ties, Black
045-MB/A/11/NT	Adhesive Mounting Base, 100 Pack, for 18 to 50 lb Cable Ties, Natural
045-MB/S/11/BK	Screw Mounting Base, 100 Pack, for 18 to 50 lb Cable Ties, Black
045-MB/S/11/NT	Screw Mounting Base, 100 Pack, for 18 to 50 lb Cable Ties, Natural

### Features:

- Material: Polyamide 6.6 (PA66)
- Operating Temperature: -40°F +185°F (-40°C+85°C) continuous
- Flammability: UL 94 V2
- Color: Natural, Black
- 100 per bag



# Cable Management ▶ J-Hooks and D Rings

## J-Hooks

CABLING SUPPORT INFRASTRUCTURE

3/4 in    15/16 in    15/16 in    2 in    2 in



048-124/34W14    048-125/16W14    048-126/16W38    048-127/20W14    048-128/20W38  
 holds up to 16 CAT5E or 10 CAT6    holds up to 80 CAT5E or 50 CAT6

4 in    2 in    3/4 in



048-123/40    048-122/20    048-121/34  
 holds up to 300 CAT5E or 185 CAT6    holds up to 80 CAT5E or 50 CAT6    holds up to 16 CAT5E or 10 CAT6



Item #	Description
048-121/34	J-Hook, 3/4 in Galvanized Steel, Holds up to 20 4-pair CAT5E or 10 4-pair CAT6
048-122/20	J-Hook, 2 in Galvanized Steel, Holds up to 80 4-pair CAT5E or 50 4-pair CAT6
048-123/40	J-Hook, 4 in Galvanized Steel. Holds up to 300 4-pair CAT5E or 185 4-pair CAT6
048-124/34W14	J-Hook, 3/4 in Galvanized Steel, with #12 Wing for 1/4 in Rod
048-125/16W14	J-Hook, 1 5/16 in Galvanized Steel, with #12 Wing for 1/4 in Rod
048-126/16W38	J-Hook, 1 5/16 in Galvanized Steel, with Wing for 3/8 in Rod
048-127/20W14	J-Hook, 2 in Galvanized Steel, with #12 Wing for 1/4 in Rod
048-128/20W38	J-Hook, 2 in Galvanized Steel, with Wing for 3/8 in Rod

### Features:

- Galvanized steel; Rust resistant zinc coating
- Hooks available with wing, which mounts on vertically spanning steel rods
- Winged Hooks feature cable retainer pin
- Wing attachments mount on 1/4 in or 3/8 in rods

## Distribution D Rings

holds up to 75 CAT5E    holds up to 150 CAT5E    holds up to 250 CAT5E    holds up to 425 CAT5E



048-200/0200    048-201/0300    048-203/0500    048-204/0800

2 in    3 in    5 in    8 in



Item #	Description
048-200/0200	Distribution D Ring, 2 in, Aluminum
048-201/0300	Distribution D Ring, 3 in, Aluminum
048-203/0500	Distribution D Ring, 5 in, Aluminum
048-204/0800	Distribution D Ring, 8 in, Aluminum

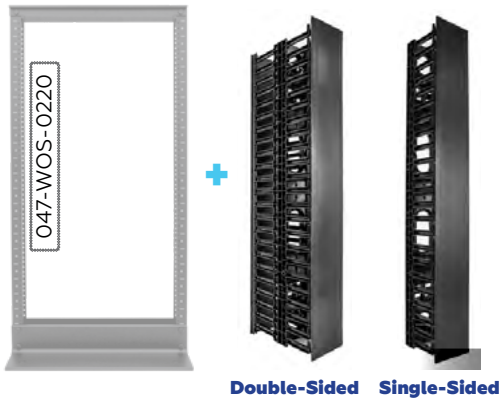
### Features:

- Aluminum
- Available in multiple sizes
- Used to provide support to vertical and horizontal cable runs

# Racks & Accessories ▶ Vertical Wire Managers

## 20 RMU

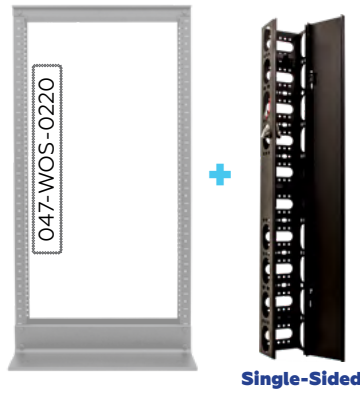
Plastic



Double-Sided Single-Sided

## 20 RMU

Metal



Single-Sided

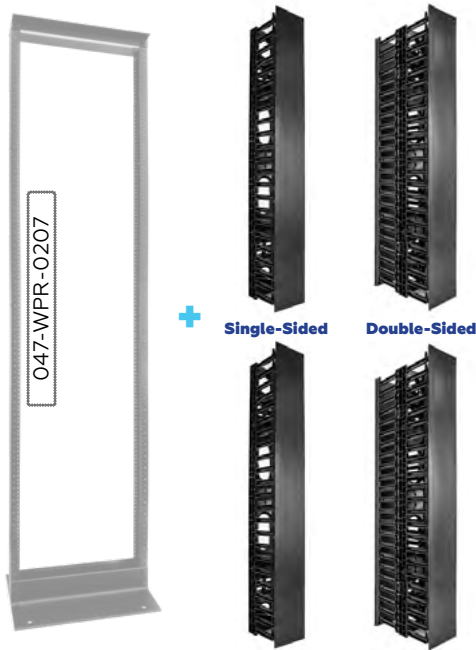
Item #	Description
047-WVM-2010	20 RMU, Vertical Wire Manager, Metal

Height	Width	Depth	Weight
32 in	3.7 in	3 in	7 lb

Open Rack Enclosures	P146
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## 45 RMU

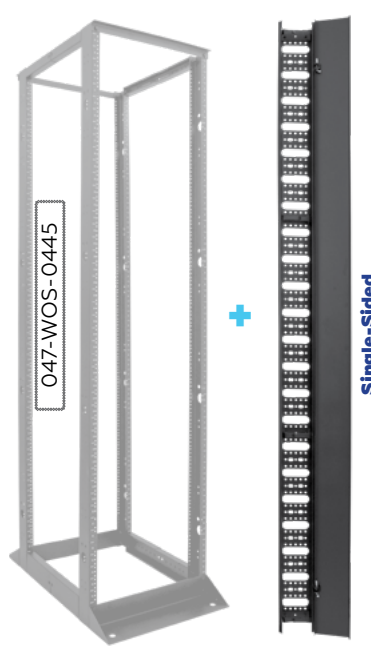
Plastic



Single-Sided Double-Sided

## 45 RMU

Metal



Single-Sided

Item #	Description
047-WVM-4510	45 RMU, Vertical Wire Manager, Metal

Height	Width	Depth	Weight
79 in	3.7 in	3 in	30 lb

### Features:

- Steel frame design for strength and rigidity
- 1.0mm thick steel
- Highly functional and stylish
- Static resistant powder coating
- Mounts on either side of the Rack

Compatible with 047-WOS-0445 only.  
Not compatible with 047-WPR-0207



Double-Sided Single-Sided



Height	Width	Depth	Type
40-6/16 in	5 in	6-5/16 in	Single-Sided
40-6/16 in	5 in	12 in	Double-Sided

Note:  
Sold as  
a set of 2

EASIER SHIPPING  
LIGHT WEIGHT



Item #	Description
047-VMF-4501	45 RMU, Vertical Wire Manager, Plastic, Single-Sided
047-VMF-4502	45 RMU, Vertical Wire Manager, Plastic, Double-Sided

### Features:

- Made of high quality plastic
- Removable cover for easy access
- Flexible fingers for easy cable feed
- Mounts on either side of a rack (L/R)
- Compatible with most relay racks
- One unit includes two sections (2X 22.5U)
- Couple both sections together to get 45 RMU or use one section with a 20 RMU relay rack
- Includes 4 screws and 2 metal ears and hardware to be installed between two racks (universal fit)

## Racks & Accessories ▶ Horizontal Wire Managers

### 1 RMU, 2 RMU Horizontal Wire Manager Closed Design

Item #	Description
044-2393/DC/1U	1 RMU, Horizontal Wire Manager - Closed Design (cover included)
044-2394/DC/2U	2 RMU, Horizontal Wire Manager - Closed Design (cover included)

Height 1 3/4 in Width 19 in Depth 3 in Weight 2 lb

**1 RMU**



View Without Cover

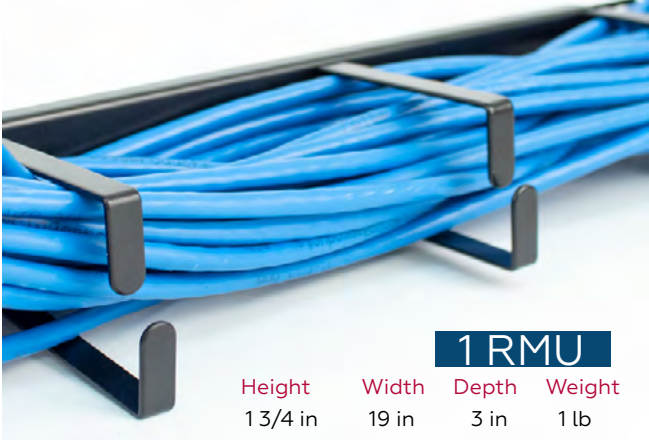
View With Cover

Height 3.5 in Width 19 in Depth 3 in Weight 2 lb

**2 RMU**



Item #	Description
044-2393/1U	1 RMU, Horizontal Wire Manager - with metal holders, no cover



Height 1 3/4 in Width 19 in Depth 3 in Weight 1 lb

**1 RMU**

**Features:**

- Durable black powder coating (metal)
- Features a closed design that covers the cable
- Convenient universal mounting
- Mounts on any standard 19 in rack or Wall-Mount

### 1 RMU, 2 RMU Horizontal Wire Manager Double-Sided

**1 RMU**



Height 1.75 in Width 19 in Depth 4 in Weight 1.5 lb

**2 RMU**



Height 3 in Width 19 in Depth 6 in Weight 3 lb

Item #	Description
044-2391/DS/1U	1 RMU, Horizontal Wire Manager Double-Sided
044-2392/DS/2U	2 RMU, Horizontal Wire Manager Double-Sided

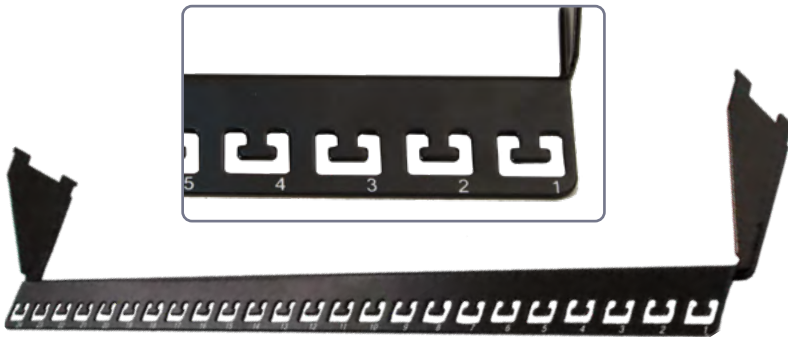
**Features:**

- Fits standard 19 in Racks or Wall-Mounts
- 1 RMU & 2 RMU, spans 2 standard rack holes (3.50 in)
- Steel Main Mount
- Plastic Wire Management Fingers
- Plastic Covers
- Comes with x4 M6 screws (cage nuts not included)

## Racks & Accessories ▶ Support Bracket

### 1 RMU, 2 RMU Patch Panel Support Bracket

Designed for the Vertical Cable Panels  
041 and 042 Series



Item #	Description
--------	-------------

044-2396/1U	1 RMU, Patch Panel Support Bracket - For 24 Port Patch Panel
044-2397/2U	2 RMU, Patch Panel Support Bracket - For 48 Port Patch Panel

**Features:**

- Has a durable black powder coating
- Fits Vertical Cable patch panels
- Durable steel

### 1 RMU, 2 RMU Wall-Mount Brackets



Comes with mounting screws

Item #	Description
--------	-------------

046-388/S	1 RMU Mounting Bracket
046-389/S	2 RMU Mounting Bracket

046-388/S



046-389/S



### Screws, Washers & Cage Nuts



047-WSN-0050



047-WSN-0600



047-WSN-0070

Item #	Description
--------	-------------

047-WSN-0050 (x50 per bag)	x50 M6 Screws, x50 Washers & x50 Nuts - Length 12 mm (0.47 inches)
047-WSN-0600 (x50 per bag)	x50 #12-24 US Style Screws & Washers - Length 16 mm (0.62 inches)
047-WSN-0070 (x50 per bag)	x50 #10-32 US Style Screws & Washers - Length 20 mm (0.75 inches)

### 1 RMU, 19 in Power Strip with Circuit Breaker



**Features:**

- Mounts on any standard 19 in rack or Wall-Mount
- 8 Way
- Comes with screws and washers
- 15A, 125V
- Protective switch cover

Item #	Description
--------	-------------

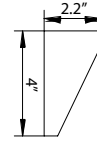
047-WPS-2000	1 RMU, 19 in Power Strip with Circuit Breaker
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Height	Width	Depth	Weight	Cord Length
2.5 in	19 in	2 in	2 lb	6 FT

# Racks & Accessories ▶ Vertical Wall-Mount Rack

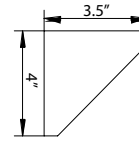
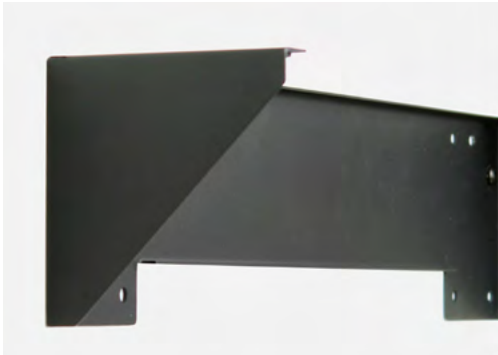
## 1 RMU, 2 RMU, 3 RMU, 4 RMU Vertical Wall-Mount Rack / Bracket

CABLING SUPPORT INFRASTRUCTURE



Height 4 in Width 19 in Depth 2.2 in Weight 1.5 lb Capacity 11 lb

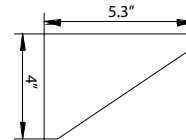
**1 RMU**



Height 4 in Width 19 in Depth 3.5 in Weight 1.7 lb Capacity 15 lb

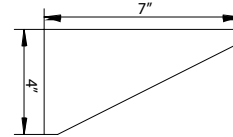
**2 RMU**

Static-resistant black paint finish



Height 4 in Width 19 in Depth 5.3 in Weight 1.98 lb Capacity 17.6 lb

**3 RMU**



Height 4 in Width 19 in Depth 7 in Weight 2.2 lb Capacity 22 lb

**4 RMU**



Item #	Description
047-WVR-1000	1 RMU Vertical Wall-Mount Rack / Bracket
047-WVR-2000	2 RMU Vertical Wall-Mount Rack / Bracket
047-WVR-3000	3 RMU Vertical Wall-Mount Rack / Bracket
047-WVR-4000	4 RMU Vertical Wall-Mount Rack / Bracket

### Features:

- Aluminum Material.
- Mounts flush to wall & under desk.
- Pre drilled holes for #12-24 screws.
- 4 Screws and Washers Included.
- Compatible with 19 in rack mountable equipment.



## Racks & Accessories ▶ Wall-Mount Brackets

### 1 RMU, 2 RMU and 4 RMU Hinged Type - Adjustable Wall-Mount Brackets



Comes with M4 screws



**1 RMU**  
046-388/E



**2 RMU**  
046-389/E



**4 RMU**  
046-390/E



#### Features:

- Hinge Type Bracket
- Adjustable Depth 10 in to 13 in
- SPCC, 2.0mm Thickness (14 AWG)
- Comes with screws

Item #	Description
046-388/E	1 RMU, Hinge Type Adjustable Wall-Mount Bracket. 10 in to 13 in Adjustable Depth. Fits 12 & 24 Port.
046-389/E	2 RMU, Hinge Type Adjustable Wall-Mount Bracket. 10 in to 13 in Adjustable Depth. Fits 48 Port.
046-390/E	4 RMU, Hinge Type Adjustable Wall-Mount Bracket. 10 in to 13 in Adjustable Depth. Fits 96 Port.

Item #

Description

046-388/E

1 RMU, Hinge Type Adjustable Wall-Mount Bracket. 10 in to 13 in Adjustable Depth. Fits 12 & 24 Port.

046-389/E

2 RMU, Hinge Type Adjustable Wall-Mount Bracket. 10 in to 13 in Adjustable Depth. Fits 48 Port.

046-390/E

4 RMU, Hinge Type Adjustable Wall-Mount Bracket. 10 in to 13 in Adjustable Depth. Fits 96 Port.



### 1 RMU, 2 RMU and 4 RMU Hinged Type Wall-Mount Brackets



046-388

**1 RMU**



046-389

**2 RMU**



046-390

**4 RMU**



Comes with M4 screws



Item #	Description
046-388	1 RMU, Hinged Type Wall-Mount Bracket, 19 inW x 1 3/4 inH x 6 in
046-389	2 RMU, Hinged Type Wall-Mount Bracket, 19 in W x 3 1/2 in H x 6 in
046-390	4 RMU, Hinged Type Wall-Mount Bracket, 19 inW x 5 1/4 inH x 6 in

Description

046-388

1 RMU, Hinged Type Wall-Mount Bracket, 19 inW x 1 3/4 inH x 6 in

046-389

2 RMU, Hinged Type Wall-Mount Bracket, 19 in W x 3 1/2 in H x 6 in

046-390

4 RMU, Hinged Type Wall-Mount Bracket, 19 inW x 5 1/4 inH x 6 in

#### Features:

- Made of heavy duty steel
- Coated with a tough static resistant black finish
- Various styles to suit various applications
- 046-388/S & 046-389/S come with 2 mounting screws
- 046-388, 046-389, 046-390 come with M4 screws

# Racks & Accessories ▶ Racks

## Open Rack Enclosures

CABLING SUPPORT INFRASTRUCTURE



### 2 Post, 20 RMU

047-WOS-0220

Height	Width	Depth	Base Dim.	Weight	Capacity
40 in	20 in	14 in	14x20.27 in	21 lb	440 lb



Comes unassembled  
Easy assembly

047-WSN-0600



#### Features:

- Multiple-vendor equipment compatibility
- Aluminum frame design for strength and rigidity; marked in unit increments
- Static resistant powder coat finish
- 4.5 mm aluminum
- Pre-drilled holes for #12-24 screws (WOS Series), and #10-32 screws (WPR)

Item #	Description
047-WOS-0220	20 RMU, 2 post, 19 in Open Rack
047-WPR-0207	45 RMU, 2 post, 19 in Open Rack
047-WOS-0445	45 RMU, 4 post, 19 in Open Rack



### 2 Post, 45 RMU

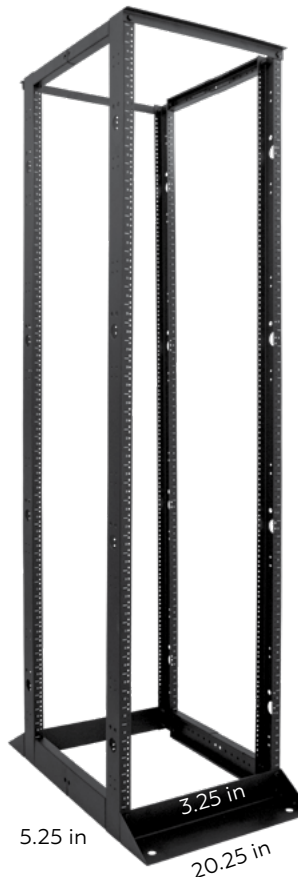
047-WPR-0207

Comes unassembled  
Easy assembly  
**Made in USA**

047-WSN-0070



Height	Width	Base Dim.	Weight	Capacity
84 in	20.25 in	15x20.25 in	28 lb	1200 lb



### 4 Post, 45 RMU

047-WOS-0445

Comes unassembled  
Easy assembly  
Adjustable depth  
2 mm steel

047-WSN-0600



Height	Width	Depth	Weight	Capacity
84 in	20 in	24-36 in	61 lb	1322 lb

# Racks & Accessories ▶ Wall-Mounts - 047-WFJ SERIES

## 6, 8, 9, 12, 16, 20 RMU Wall-Mount Open Frame Rack

CABLING SUPPORT INFRASTRUCTURE

### 6 RMU



047-WFJ-0653

Height	Width	Depth	Weight	Capacity
14.25 in	20 in	18 in	15 lb	26 lb

### 8 RMU



047-WFJ-0853

Height	Width	Depth	Weight	Capacity
17.75 in	20 in	18 in	15.6 lb	33 lb

### 9 RMU



047-WFJ-0953

Height	Width	Depth	Weight	Capacity
19.50 in	20 in	18 in	15.7 lb	44 lb

### 12 RMU



047-WFJ-1253

Height	Width	Depth	Weight	Capacity
24.75 in	20 in	18 in	17.25 lb	55 lb

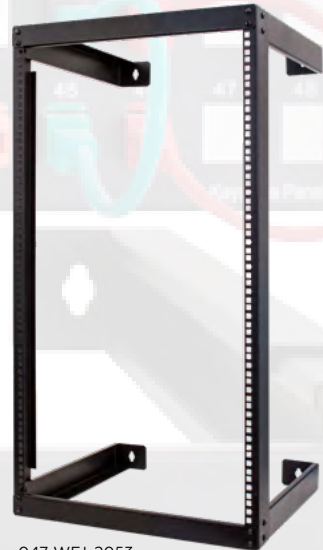
### 16 RMU



047-WFJ-1653

Height	Width	Depth	Weight	Capacity
31.75 in	20 in	18 in	18.5 lb	66 lb

### 20 RMU



047-WFJ-2053

Height	Width	Depth	Weight	Capacity
38.80 in	20 in	18 in	20.7 lb	66 lb

Mounting Width  
19 in

x12 sets of  
047-WSN-0050



#### Features:

- Multiple-vendor equipment compatibility
- Steel frame open Wall-Mount with M6 screws and cage nuts
- Static resistant powder coat finish
- Ships unassembled with hardware included
- Up to 66 lb load capacity

Item #	Description
047-WFJ-0653	6 RMU Wall-Mount Open Frame Rack
047-WFJ-0853	8 RMU Wall-Mount Open Frame Rack
047-WFJ-0953	9 RMU Wall-Mount Open Frame Rack
047-WFJ-1253	12 RMU Wall-Mount Open Frame Rack
047-WFJ-1653	16 RMU Wall-Mount Open Frame Rack
047-WFJ-2053	20 RMU Wall-Mount Open Frame Rack

# Racks & Accessories ▶ Wall-Mounts - 047-WFM SERIES

## 6, 8, 9, 12, 16, 20 RMU Wall-Mount Open Fixed - Adjustable

CABLING SUPPORT INFRASTRUCTURE

6 RMU						
047-WFM-0626						
Height	Width	Mounting Width	Depth	Weight	Capacity	
14.29 in	20 in	19 in	18-30 in	17.6 lb	33 lb	

8 RMU						
047-WFM-0826						
Height	Width	Mounting Width	Depth	Weight	Capacity	
17.8 in	20 in	19 in	18-30 in	22 lb	44 lb	

9 RMU						
047-WFM-0926						
Height	Width	Mounting Width	Depth	Weight	Capacity	
19.6 in	20 in	19 in	18-30 in	22.7 lb	55 lb	

12 RMU						
047-WFM-1226						
Height	Width	Mounting Width	Depth	Weight	Capacity	
24.8 in	20 in	19 in	18-30 in	23.1 lb	66 lb	

16 RMU						
047-WFM-1626						
Height	Width	Mounting Width	Depth	Weight	Capacity	
31.77 in	20 in	19 in	18-30 in	24.9 lb	66 lb	

20 RMU						
047-WFM-2026						
Height	Width	Mounting Width	Depth	Weight	Capacity	
38.80 in	20 in	19 in	18-30 in	25.8 lb	77 lb	

Item #	Description
047-WFM-0626	6 RMU Wall-Mount Open Fixed
047-WFM-0826	8 RMU Wall-Mount Open Fixed
047-WFM-0926	9 RMU Wall-Mount Open Fixed
047-WFM-1226	12 RMU Wall-Mount Open Fixed
047-WFM-1626	16 RMU Wall-Mount Open Fixed
047-WFM-2026	20 RMU Wall-Mount Open Fixed

### Features:

- Multiple-vendor equipment compatibility
- 2 mm steel
- Steel frame open Wall-Mount with M6 screws and cage nuts
- Static resistant powder coat finish
- Ships unassembled with hardware included



x12 sets of 047-WSN-0050 are included

Mounting Width  
19 in



# Racks & Accessories ▶ Wall-Mounts - 047-WSM SERIES

## 6, 8, 9, 12, 16, 20 RMU Wall-Mount Open Rack Swing Out, Adjustable



**Height** 16.4 in    **Width** 21.65 in    **Depth** 18-30 in    **Weight** 25 lb    **Capacity** 25 lb (open position)  
65 lb (close position)

047-WSM-0626



**Height** 19.9 in    **Width** 21.65 in    **Depth** 18-30 in    **Weight** 27 lb    **Capacity** 25 lb (open position)  
65 lb (close position)

047-WSM-0826

047-WSM-0926



**Height** 21.70 in    **Width** 21.65 in    **Depth** 18-30 in    **Weight** 27.5 lb    **Capacity** 33 lb (open position)  
65 lb (close position)

047-WSM-2026

Mounting Width  
for all WSM's  
19 in

Comes unassembled  
Easy assembly



**Height** 26.9 in    **Width** 21.65 in    **Depth** 18-30 in    **Weight** 29.1 lb    **Capacity** 33 lb (open position)  
65 lb (close position)

### 16 RMU

**Height** 33.9 in    **Width** 21.65 in    **Depth** 18-30 in    **Weight** 31.9 lb    **Capacity** 44 lb (open position)  
65 lb (close position)

### 20 RMU



**Height** 40.9 in    **Width** 21.65 in    **Depth** 18-30 in    **Weight** 32.6 lb    **Capacity** 44 lb (open position)  
65 lb (close position)



x12 set of  
047-WSN-0050

Item #	Description
047-WSM-0626	6 RMU Wall-Mount Open Rack - Swing Out
047-WSM-0826	8 RMU Wall-Mount Open Rack - Swing Out
047-WSM-0926	9 RMU Wall-Mount Open Rack - Swing Out
047-WSM-1226	12 RMU Wall-Mount Open Rack - Swing Out
047-WSM-1626	16 RMU Wall-Mount Open Rack - Swing Out
047-WSM-2026	20 RMU Wall-Mount Open Rack - Swing Out

#### Features:

- Swing out door can be mounted from left or right
- 2-mm cold-rolled steel
- Steel frame open Wall-Mount with M6 screws and cage nuts
- Featuring adjustable depth from 18 in to 30 in
- Mounting Width 19 in

## 15, 18, 21, 24 inches DVR Lockbox

CABLING SUPPORT INFRASTRUCTURE

Ships Fully Assembled



Front View



Rear View

047-DVR-1515				
Height	Width	Depth	Weight	<b>15 in</b>
5 in	15 in	15 in	14 lb	

047-DVR-1818				
Height	Width	Depth	Weight	<b>18 in</b>
5 in	18 in	18 in	22 lb	

047-DVR-2121				
Height	Width	Depth	Weight	<b>21 in</b>
8 in	21 in	21 in	32 lb	

047-DVR-2124				
Height	Width	Depth	Weight	<b>21 in</b>
8 in	21 in	24 in	35.5 lb	

Item #	Description
047-DVR-1515	15 inch DVR Security Lockbox (15 in depth)
047-DVR-1818	18 Inch DVR Security Lockbox (18 in depth)
047-DVR-2121	21 Inch DVR Security Lockbox (21 in depth)
047-DVR-2124	21 Inch DVR Security Lockbox (24 in depth)

**Features:**

- Heavy duty steel
- Cooling fan included
- Lockable front panel



## Horizontal DVR Mounting Bracket



Mounting Hardware included

Item #	Description
047-DVR-H	Horizontal DVR Mounting Bracket

**Features:**

- Black powder coating
- Includes mounting hardware



# Racks & Accessories ▶ Wall-Mounts - 047-WWM SERIES

## 6 RMU, 9 RMU, 12 RMU Wall-Mount Enclosure - Side Panel Access

Ships Fully Assembled

### 6 RMU

Height	Width	Depth	Mounting Depth	Weight	Capacity
14.57 in	23.62 in	17.72 in	15.7 in	32 lb	132 lb



047-WWM-0660



### 9 RMU

Height	Width	Depth	Mounting Depth	Weight	Capacity
19.69 in	23.62 in	17.72 in	15.7 in	40 lb	132 lb



047-WWM-0960



### 12 RMU

Height	Width	Depth	Mounting Depth	Weight	Capacity
25 in	23.62 in	17.72 in	15.7 in	53 lb	132 lb



047-WWM-1260



#### Features:

- Structural integrity, cooling, and cable management all in one
- Install a wide variety of shelving accessories and products with ease
- Ideal for rack mounted servers and storage products, audio/video equipment
- Side Panels open for easy access to equipment

#### Item #

#### Description

047-WWM-0660	6 RMU Wall-Mount Enclosure - Side Access
047-WWM-0960	9 RMU Wall-Mount Enclosure - Side Access
047-WWM-1260	12 RMU Wall-Mount Enclosure - Side Access

CABLING SUPPORT INFRASTRUCTURE

# Racks & Accessories ▶ Wall-Mounts - 047-WHS Series

## 12, 15, 20 RMU Wall-Mount Enclosure - Swing Out

CABLING SUPPORT INFRASTRUCTURE

Item #	Description
047-WHS-1260	12 RMU Wall-Mount Swing out Enclosure, 24 in Depth
047-WHS-1560	15 RMU Wall-Mount Swing out Enclosure, 24 in Depth
047-WHS-2060	20 RMU Wall-Mount Swing out Enclosure, 24 in Depth
047-WHS-1270	12 RMU Wall-Mount Swing out Enclosure, 31 in Depth
047-WHS-1570	15 RMU Wall-Mount Swing out Enclosure, 31 in Depth
047-WHS-2070	20 RMU Wall-Mount Swing out Enclosure, 31 in depth

Ships Fully Assembled



x20 sets of 047-WSN-0050 screws included

Item #	Height	Width	Depth	Usable Depth	Weight	Capacity
047-WHS-1260	25 in	24 in	24 in	15.75 in	68 lb	132 lb
<b>12 RMU</b>						
047-WHS-1270	25 in	24 in	31 in	22.5 in	67 lb	132 lb
047-WHS-1560	30 in	24 in	24 in	15.75 in	70.5 lb	132 lb
<b>15 RMU</b>						
047-WHS-1570	30 in	24 in	31 in	22.5 in	81.5 lb	132 lb
047-WHS-2060	39 in	24 in	24 in	15.75 in	85.5 lb	132 lb
<b>20 RMU</b>						
047-WHS-2070	39 in	24 in	31 in	22.5 in	98.5 lb	132 lb

### Features:

- Steel Wall-Mount Enclosure
- Dust protective glass front door with safety lock for convenience & protection
- Sturdy opening & locking door
- Features a thick steel Wall-Mounting frame that hinges to the back of main enclosure.
- Releases for a swing out.
- Cooling fan and power supply built-in



**Virtual Realty Experience (get inside of the enclosure)**





# Racks & Accessories ▶ Network Cabinet ▶ Network Server Cabinet

## Network Cabinets - 047-NCA Series



x40 sets of 047-WSN-0050 screws included



### Features:

- Caster wheels and supporting feet for stability
- Vented sections on top and bottom
- Easily removable side panels
- 1.5 mm Cold Rolled Steel

Ships Fully Assembled - in a Wooden crate

Depending on application, compatible with all Vertical Cable 19 in items.

Height	Width	Depth	Usable Depth	Color	Weight	Capacity
54.5 in	24 in	24 in	20 in	Black	150 lb	2204 lb

047-NCA-2766 **27 RMU**

Height	Width	Depth	Usable Depth	Color	Weight	Capacity
72 in	24 in	24 in	20 in	Black	193 lb	2204 LB

047-NCA-3766 **37 RMU**

Height	Width	Depth	Usable Depth	Color	Weight	Capacity
82 in	24 in	24 in	20 in	Black	218 lb	2204 LB

047-NCA-4266 **42 RMU**

Item #	Description
047-NCA-2766	27 RMU Rack Space Network Cabinet
047-NCA-3766	37 RMU Rack Space Network Cabinet
047-NCA-4266	42 RMU Rack Space Network Cabinet



## Server Cabinet - 047-SRD Series

### Features:

- Caster wheels and supporting feet installed for stability
- Vented sections on top and bottom
- Easily removable side panels
- Ships fully assembled in a wooden crate



Watch the video on verticalcable.com

Ships Fully Assembled - in a Wooden crate

Depending on application, compatible with all Vertical Cable 19 in items.



047-WSN-0050 screws included

Item #	Description
047-SRD-3768	37 RMU Rack Space Network Server Cabinet

Height	Width	Depth	Usable Depth	Color	Weight	Capacity
72 in	24 in	31.5 in	25.6 in	Black	194 lb	2204 lb



Front



Rear

CABLING SUPPORT INFRASTRUCTURE

## Racks & Accessories ▶ Shelves

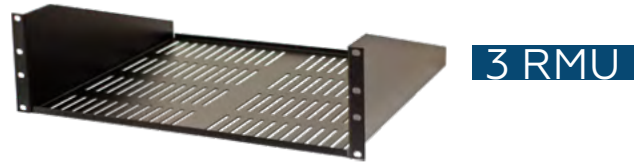
### 1 RMU, 2 RMU & 3 RMU 19 in Single-Sided Vented Shelf



**1 RMU**

Height	Width	Depth	Weight	Capacity
5.25 in	19 in	15.75 in	4.1 lb	37 lb

Height	Width	Depth	Weight	Capacity
1.75 in	19 in	12 in	3.7 lb	20 lb



**3 RMU**



**2 RMU**

Height	Width	Depth	Weight	Capacity
3.50 in	19 in	15.75 in	3.9 lb	37 lb

Item #	Description
047-WVS-1300	1 RMU, 19 in Single-Sided Vented Shelf
047-WVS-2400	2 RMU, 19 in Single-Sided Vented Shelf
047-WVS-3400	3 RMU, 19 in Single-Sided Vented Shelf

**Features:**

- One-piece 19-in Vented Single-Sided Shelf
- Mounts on any standard 19 in rack or Wall-Mount
- Perfect for server or network usage
- Comes with screws, washers and cage nuts
- Load Capacity up to 37lb

### 1 RMU, 2 RMU and 3 RMU 19 in Single-Sided Non-Vented Shelf



**1 RMU**

Height	Width	Depth	Weight	Capacity
5.25 in	19 in	15.63 in	4.9 lb	44 lb

Height	Width	Depth	Weight	Capacity
1.75 in	19 in	12 in	3.9 lb	30.8 lb



**3 RMU**



**2 RMU**

Height	Width	Depth	Weight	Capacity
3.50 in	19 in	15.70 in	4.4 lb	44 lb



Item #	Description
047-WSS-1300	1 RMU, 19 in Single-Sided Non-Vented Shelf
047-WSS-2400	2 RMU, 19 in Single-Sided Non-Vented Shelf
047-WSS-3400	3 RMU, 19 in Single-Sided Non-Vented Shelf

**Features:**

- One-piece 19-in Non-Vented Shelf
- Mounts on any standard 19 in rack or Wall-Mount
- Made of 1.5 mm EG Steel
- Comes with 8 sets of M6 Washers/Screws/Cage Nuts
- Load Capacity up to 44 lb
- Suitable for network electronics/components
- Perfect for server installations

# 1 RMU, 19 in Vented Sliding Shelf



Height 1.75 in   Width 19 in   Depth 25-36 in   Weight 10 lb   Capacity 44 lb

**1 RMU**

**Only compatible with 4 post rack**

**Features:**

- 1 RMU, 19 in Vented Sliding-out Shelf
- Mounts on any standard 4-post 19 in rack
- Vented to ensure cooling
- Made of 1.5 mm EG Steel
- Comes with 8 sets of M6 Washers/Screws/Cage Nuts
- Load Capacity 44 lb
- Depth: 25 in-36 in
- Suitable for network electronics/components

Item #	Description
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047-WSS-3551	1 RMU, 19 in Vented Sliding Shelf
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# 1 RMU and 2 RMU 19 in Heavy-Duty Adjustable Shelf



**Only compatible with 4 post rack**

**Features:**

- Heavy duty adjustable shelf mounts on any standard 4-post 19 in rack
- Made of 1.5 mm EG Steel
- Comes with 16 sets of M6 Washers/Screws/Cage Nuts
- Load Capacity 121 lb
- Adjustable depth: 22 in to 42 in
- Suitable for network electronics/components & keyboards

Height 3 in   Width 19 in   Depth 42 in   Weight 13 lb   Capacity 121 lb



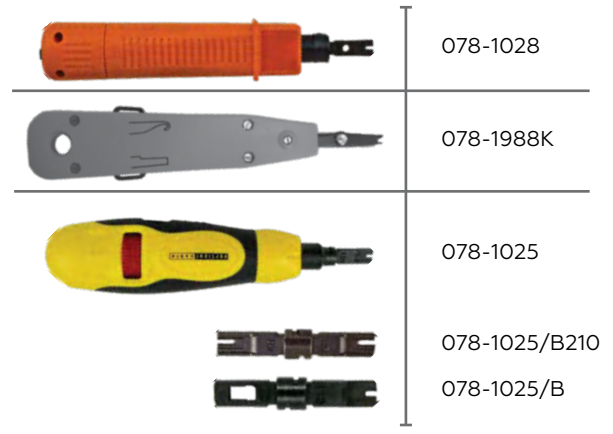
Item #	Description
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047-WAS-1400	1 RMU, 4 point, Heavy Duty Adjustable Shelf
047-WAS-2400	2 RMU, 4 point, Heavy Duty Adjustable Shelf

# Tools & Testers

## Punch Down Tools

Item #	Description
078-1028	Punch Down Tool, Spring-Loaded Adjustable Impact, Cuts & Terminates Conductors on 110/88
078-1988K	Impact Punch Down Tool for Krone Terminal Block
078-2150	I-Punch Tool for Vertical Cable V-Max Keystone Jacks
078-2155/S	I-Punch Tool for Shielded Keystone Jacks - <b>NEW</b>
078-1025	Impact Punch Down Tool with 110/88/66 Blades
078-1025/B	110 Type Blade for 078-1025 Impact Punch Down Tool
078-1025/B210	Krone Type Blade for 078-1025 Impact Punch Down Tool



## Crimping & Compression Tools

- Tools feature wide, comfortable handles.
- Durable, long-lasting hardware

Item #	Description
078-1016	Crimping Tool for RJ45, 8P8C, Built-in Cutting-Stripping Blade
078-1017	Crimping Tool for RJ11, RJ12, RJ45, Built-in Cutting-Stripping Blade
078-1018	Compression Tool, Terminates RCA, BNC, RG59, RG6
078-1019	Compression Tool, Terminates RG11
078-2152/EZC	Crimping Tool for Feed-through Plugs
078-2153/B	Replacement Blade for EZ Feed Crimping Tool
078-2154/EZC/S	Tool for CAT6a Easy Feed RJ45 Modular Plug for Shielded Cable



### Tester

Cable Tester for RJ11, RJ45  
078-2149



## Cutters & Strippers

Item #	Description
078-1022	Universal Cable Stripper for RG59, RG6, RG11, Flat Telephone Wire
078-1023	Miniature 5 Adjustable Stripper/Cutter/Punch Down Tool, 10-30 AWG Wire, UTP/STP Round Cable
078-1024	Cable Cutter, Cuts Wire up to 0.42/10.7mm
078-1256	Coaxial Stripper, Thumbwind-Style, Adjustable Blade, For RG59 & RG6

# "THE MOST-WANTED TOOL" in the Industry

## I-Punch Tool by Vertical Cable

"MOST-WANTED TOOL IN THE INDUSTRY"

# TRY OUR FAMOUS I-PUNCH TOOL

PART NUMBER 078-2150




"One of the most significant changes was our move from Leviton to Vertical Cable for keystone jacks, patch cables, patch panels, etc."

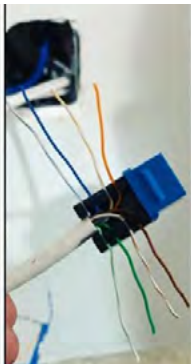


"The @verticalcable crimping tool and V-Max series keystones are incredible and a massive time saver."

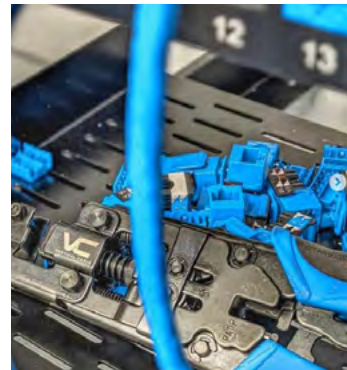
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# TO TERMINATE A KEYSTONE JACK

WITH I-PUNCH TOOL BY VERTICAL CABLE



**igotsecurity** What a difference having the right tool makes. After routinely using my #southwire punchdown tool to terminate all keystone jacks... I decided to jump into trying the i-punch tool by @verticalcable. Don't get me wrong, using a punchdown tool is not bad... BUT when you need to terminate 40+ keystone jacks it takes time...  
 All I can say is what a time saver this tool is. This tool is light, easy to use and terminates and cuts the excess wires very neatly.  
 Special shoutout to @allgreenlightsllc for exposing me and the community to some of the tools of the trade. I



**allgreenlightsllc** At the job I just wrapped up, I had an interesting conversation with a 20yr telco tech. We were talking shop and technique and he asked me for my JackRapid and he asked me for my JackRapid from @fluka\_networks. I said, "I don't have one." He says, "please tell me you aren't a dinosaur who punches each conductor individually." I said, "nope. I switched from @leviton keystones to V-Max keystones and the I-Punch tool from @verticalcable." He paused for a minute and said, "wait, you switched from Leviton to Vertical Cable?" I said, "that's exactly what I did" and threw him a spare I-Punch tool.  
 He held it for a minute and said:  
 Liked by renej83 and 426 others  
 14 HOURS AGO



## Meet the New I-Punch Tool - Now for VC Shielded Keystone Jacks

078-2150



078-2155/S



### ONE PUNCH - AND DONE!

CABLING SUPPORT INFRASTRUCTURE

The background image is a dark, high-angle photograph of a large industrial factory. The floor is filled with various pieces of machinery, including lathes, mills, and workbenches. Several workers in blue uniforms are visible, engaged in their tasks. The ceiling is high with a grid of lights. The overall atmosphere is one of a busy, large-scale manufacturing environment.

# **INDUSTRIAL and HARSH ENVIRONMENT SYSTEMS**

**CAT5E**

059-488/CMXF25P  
 059-484/CMX  
 059-491/CMX2K  
 059-485/CMXF  
 059-487/S/CMXF  
 059-489/WS/CMXF  
 059-486/CMXT  
 059-486/US/CMXT  
 059-490/WS/CMXT  
 059-493/CMXT2K  
 059-502/DT/CMXT  
 059-494/WS/CWT  
 059-494/RB/CWT  
 059-495/S1/CWT  
 059-496/S2/CWT  
 059-497/MESG  
 059-498/S/MESG

P24

**CAT6**

069-559/CMX  
 069-560/CMXF  
 069-558/S/CMXF  
 069-561/CMXT  
 069-557/US/CMXT  
 069-562/MESG  
 069-563/S/MESG

P16

**CAT6a**

069-564/A/CMX  
 069-564/A/CMXT  
 069-567/SP/CMXT  
 069-565/A/CMXT

P10

**OPTICAL FIBER**

261-11900A  
 261-11902A  
 261-11904A  
 261-11906A  
 261-11908A  
 261-11910A  
 261-11912A  
 261-11916B  
 261-11918B  
 261-11920B  
 261-11922B  
 261-11924B  
 261-11926B  
 261-11928B  
 261-13104P  
 261-13110P  
 261-13328P  
 261-13334P  
 261-13336P  
 261-13956P  
 261-13962P  
 261-13964P

P55

**COAX**

107-1952/DB/6Q - RG6  
 107-1234/DB/6S - RG6  
 107-2175/DB/BK - RG59  
 107-1032DB/R11Q - RG11

P110

**AUDIO CABLE**

209-2328/DB  
 209-2316/DB  
 209-2315/DB  
 209-2321/DB  
 209-2320/DB  
 209-2324/DB  
 209-2329/DB  
 209-2319/DB

P118

# IP-RATED PRODUCTS ▶ Ruggedized Patch Cords

## Armored OSP Cords

### SIMPLEX

SC-SC	OF Class	1 m	2 m	3 m
	OM3	255-COA3F55IY1M	255-COA3F55IY2M	255-COA3F55IY3M
SM APC	255-COAAF55IY1M	255-COAAF55IY2M	255-COAAF55IY3M	
SM UPC	255-COAF55IY1M	255-COAF55IY2M	255-COAF55IY3M	

LC-LC	OF Class	1 m	2 m	3 m
	OM3	255-COA3F77IY1M	255-COA3F77IY2M	255-COA3F77IY3M
SM APC	255-COAAF77IY1M	255-COAAF77IY2M	255-COAAF77IY3M	
SM UPC	255-COAF77IY1M	255-COAF77IY2M	255-COAF77IY3M	

### DUPLEX

SC-SC	OF Class	1 m	2 m	3 m
	OM3	255-COA3F66IY1M	255-COA3F66IY2M	255-COA3F66IY3M
SM APC	255-COAAF66IY1M	255-COAAF66IY2M	255-COAAF66IY3M	
SM UPC	255-COAF66IY1M	255-COAF66IY2M	255-COAF66IY3M	

LC-LC	OF Class	1 m	2 m	3 m
	OM3	255-COA3F88IY1M	255-COA3F88IY2M	255-COA3F88IY3M
SM APC	255-COAAF88IY1M	255-COAAF88IY2M	255-COAAF88IY3M	
SM UPC	255-COAF88IY1M	255-COAF88IY2M	255-COAF88IY3M	



### CHARACTERISTICS

		SM UPC	SM APC	OM3
Fiber:	Class:	G.652.D OS2		
	Type:	9/125 μm		
Plug:	Ferrule material:	Ceramic		
	Body color (ANSI/TIA-568.3-D):	Blue	Green	Aqua
Jacket:	Diameter:	SX: 3.0 mm DX: 3.3 mm		
	Length:	±50 mm (±2 in)		
	Material:	Thermoplastic Polyurethane (TPU)		
	Jacket color:	Black		
Performance:	Insertion loss:	≤0.3 dB		
	Insertion loss repeatability:	≤0.2 dB after 1000 mating cycles		
	Return loss:	≥50 dB	≥65 dB	≥30 dB
Environmental:	Operating temperature:	-25 °C – +75 °C (-13 °F – +167 °F)		
	Operating humidity:	≤95 % RH non-condensing		
	Storage temperature:	-45 °C – +85 °C (-49 °F – +185 °F)		
Compliance:	ANSI/TIA-568.3-D			



# IP-RATED PRODUCTS ▶ Outlet Modules

## CAT6a Outlet Modules

- 250-IOM68-A1A2 Outlet Module Socket-to-IDC CAT6a STP Panel Mounting IP68
- 250-IOM68-A2A2 Outlet Module Socket-to-Socket CAT6a STP Panel Mounting IP68



### CHARACTERISTICS

- Transmission performance: CAT6a per ANSI/TIA-568.2-D; CAT6a per ISO IEC 11801.
- Wiring schemes: T568A/T568B.
- Housing/screening: solid zinc alloy, "360°" coverage.
- Conductor gauge: solid: 22–24 AWG.
- Mating durability: Level 1, 750 mating cycles min
- Environmental protection: IP68.
- Compliance: IEC 61076-3-106 variant 01 style 2; IEC 60529.



## OF Adapter Outlet Modules

- 250-IOM68-A33C1 Outlet Module, OF Adapter, SC SX, Aqua, Panel Mounting, IP68
- 250-IOM68-A33Y1 Outlet Module, OF Adapter, SC SX, Green, Panel Mounting, IP68
- 250-IOM68-A33Z1 Outlet Module, OF Adapter, SC SX, Blue, Panel Mounting, IP68
- 250-IOM68-A34C2 Outlet Module, OF Adapter, LC DX, Aqua, Panel Mounting, IP68
- 250-IOM68-A34D2 Outlet Module, OF Adapter, LC DX, Heather Violet, Panel Mounting, IP68
- 250-IOM68-A34Y2 Outlet Module, OF Adapter, LC DX, Green, Panel Mounting, IP68
- 250-IOM68-A34Z2 Outlet Module, OF Adapter, LC DX, Blue, Panel Mounting, IP68



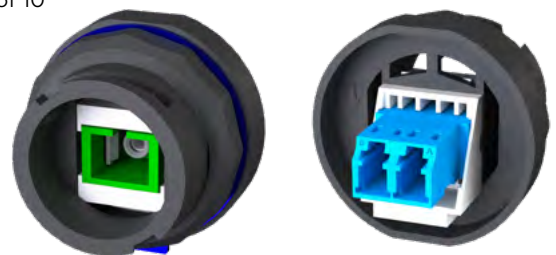
### CHARACTERISTICS

- Format: SC: SX; LC: DX.
- Fiber types: SM 9/125, MM 50/125, MM 62.5/125
- Plug types: UPC, APC.
- Adapter sleeves: Zirconia ceramic, split.
- Insertion loss (IL): 0.3 dB or lower (when used with standard-compliant plugs).
- Return loss (RL): UPC: -55 dB or better (when used with standard-compliant plugs); APC: -65 dB or better (when used with standard-compliant plugs).
- Interface standard: SC: IEC 61754-4; LC: IEC 61754-20.
- Compatibility: GR-326-CORE.
- Adapter compliance: Regulation (EC) No 1907/2006 (REACH); Directive 2011/65/EU Am. 2015/863/EU (RoHS2); UL 94 V-0.
- Environmental protection: IP68.
- Housing: IEC 61076-3-106 variant 01 style 2.



### ACCESSORIES

- 250-IOM68-0A-10 Sealing Gasket Rubber for 250-IOM68-A Modules, Replacement, Pack of 10
- 250-IOM68-0B Protective End Cap for Outlet Modules, IP68
- 250-IOM68-0B-10 Protective End Cap for Outlet Modules, IP68, Pack of 10



253-SMB67 SM Boxes	P164
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## IP-RATED PRODUCTS ▶ Terminal Modules

### CAT6a Plug Terminal Modules

- 250-ITM68-A2A2 Terminal Module, Regular 8P8C Plug, CAT6a, STP, Stranded, IP68  
 250-ITM68-B1A2 Terminal Module, Field-Terminatable Ruggedized Plug, CAT6a, STP, Solid, IP68

### CAT6a Outlet Terminal Module

- 250-ITM68-D1A2 Terminal Module, Socket-to-IDC, CAT6a, STP, IP68

#### CHARACTERISTICS

- Transmission performance: CAT6a per ANSI/TIA-568.2-D;  
 CAT6a per ISO/IEC 11801.  
 Wiring schemes: T568A/T568B.  
 Conductor gauge: solid: 22–24 AWG.  
 Environmental protection: IP68.  
 Housing: IEC 61076-3-106 variant 01 style 2;  
 EC 60529.



### OF Plug Terminal Modules

- 250-ITM68-C031 Terminal Module, OF Plug Holder, SC SX, Blank, IP68  
 250-ITM68-C042 Terminal Module, OF Plug Holder, LC DX, Blank, IP68

#### CHARACTERISTICS

- Plug compatibility: SC SX;  
 LC DX.  
 Boot length: 30 mm (1.2 in) max.  
 Compression fittings: SC SX: one (simplex) round cable opening, 2 mm–3 mm (0.08 in–0.12 in) O.D.;  
 LC DX: two (duplex) round cable openings, 2 mm–3 mm (0.08 in–0.12 in) O.D.  
 Environmental protection: IP68.  
 Housing: IEC 61076-3-106 variant 01 style 2.



#### ACCESSORIES

- 250-ITM68-0A-10 Compression Fitting for 250-ITM68-B Modules, 8.5-mm (0.35-in) cable O.D., Pack of 10  
 250-ITM68-0B-10 Compression Fitting for 250-ITM68-A Modules, 6-mm (0.24-in) cable O.D., Pack of 10  
 250-ITM68-0C-10 Sealing Gasket for 250-ITM68-C Modules, Rubber, Pack of 10  
 250-ITM68-0D-10 Sealing Gasket for 250-IOM68-D Modules, Rubber, Pack of 10  
 250-ITM68-0E-10 Protective End Cap for Plug Terminal Modules, IP68

250-IOM68 Outlet Modules	P161
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250-ICP68 Coupler Modules	P30
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## IP-RATED PRODUCTS ▶ Installation & Maintenance Tools

### Installation and Maintenance Kit

- 259-IMK01 Installation and Maintenance Kit – Basic

Includes one of each:

- |  |     |
|--|-----|
| 259-IMT01-A01 Universal Wrench for Installation and Maintenance                                  | P7; |
| 250-IOM68-0A-10 Sealing Gasket for 250-IOM68-A Modules, Rubber, Pack of 10                       | P3; |
| 250-IOM68-0B-10 Protective End Cap for Outlet Modules, IP68, Pack of 10                          | P3; |
| 250-ITM68-0D-10 Sealing Gasket for 250-IOM68-D Modules, Rubber, Pack of 10                       | P4; |
| 250-ITM68-0E-10 Protective End Cap for Plug Terminal Modules, IP68                               | P4; |
| 250-ICP68-0A-10 Sealing Gasket for 250-ICP68-A/C/D Coupler Modules, Internal, Rubber, Pack of 10 | P5; |
| 250-ICP68-0B-10 Sealing Gasket for 250-ICP68-A/C/D Coupler Modules, External, Rubber, Pack of 10 | P5; |
- Portable Carrying Soft-Case Bag.

## IP-RATED PRODUCTS ▶ Coupler Modules

### CAT6a Coupler Modules

250-ICP68-A1A2	Coupler Module for 250-ITM68-A Terminal Modules, Socket-to-Socket, CAT6a STP, IP68
250-ICP68-B1A2	Coupler Module for 250-ITM68-B Terminal Modules, Socket-to-Socket, CAT6a STP, IP68
250-ICP68-C1A2	Coupler Module, IDC-to-IDC Splice, CAT6a STP, Panel Mounting, IP68

#### CHARACTERISTICS

Transmission performance:	CAT6a per ANSI/TIA-568.2-D; CAT6a per ISO/IEC 11801.
Wiring schemes:	T568A/T568B.
Conductor gauge:	solid: 22-24 AWG.
Environmental protection:	IP68.
Housing:	IEC 61076-3-106 variant 01 style 2; EC 60529.
Locking mechanism:	bayonet.



250-ITM68 Terminal Modules	P162
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### OF Adapter Coupler Modules

250-ICP68-D4Z2	Coupler Module, OF Adapter, LC DX, Blue, Panel Mounting, IP68
250-ICP68-D4Y2	Coupler Module, OF Adapter, LC DX, Green, Panel Mounting, IP68
250-ICP68-D4C2	Coupler Module, OF Adapter, LC DX, Aqua, Panel Mounting, IP68

#### CHARACTERISTICS

Format:	LC DX.
Fiber types:	SM 9/125, MM 50/125, MM 62.5/125
Plug types:	UPC, APC.
Adapter sleeves:	Zirconia ceramic, split.
Insertion loss (IL):	0.3 dB or lower (when used with standard-compliant plugs).
Return loss (RL):	UPC: -55 dB or better (when used with standard-compliant plugs); APC: -65 dB or better (when used with standard-compliant plugs).
Interface standard:	SC: IEC 61754-4; LC: IEC 61754-20.
Compatibility:	GR-326-CORE.
Adapter compliance:	Regulation (EC) No 1907/2006 (REACH); Directive 2011/65/EU Am. 2015/863/EU (RoHS2); UL 94 V-0.
Environmental protection:	IP68.
Housing:	IEC 61076-3-106 variant 01 style 2; IEC 60529.
Locking mechanism:	bayonet.



#### ACCESSORIES

250-ICP68-0A-10	Sealing Gasket for 250-ICP68-A/C/D Coupler Modules, Internal, Rubber, Pack of 10
250-ICP68-0B-10	Sealing Gasket for 250-ICP68-A/C/D Coupler Modules, External, Rubber, Pack of 10
250-ICP68-0COA	Surface Mounting Bracket for 250-ICP68-A/C/D Coupler Modules, 1-position
250-ICP68-0COB	Surface Mounting Bracket for 250-ICP68-A/C/D Coupler Modules, 2-position
250-ICP68-0COC	Surface Mounting Bracket for 250-ICP68-A/C/D Coupler Modules, 3-position
250-ICP68-0C1A	DIN-Rail Mounting Bracket for 250-ICP68-A/C/D Coupler Modules, 1-position
250-ICP68-0C1B	DIN-Rail Mounting Bracket for 250-ICP68-A/C/D Coupler Modules, 2-position
250-ICP68-0C1C	DIN-Rail Mounting Bracket for 250-ICP68-A/C/D Coupler Modules, 3-position

# IP-RATED PRODUCTS ▶ Surface-Mount Boxes

## IP-Rated Boxes

- 253-SMB67-A1 Surface-Mount Box, 1-Port, 1-Left-In/1-Left-Out, Blank, IP66/67
- 253-SMB67-A2 Surface-Mount Box, 2-Port, 2-Left-In/2-Right-Out, Blank, IP66/67
- 253-SMB67-A3 Surface-Mount Box, 1-Port, 1-Left-In/1-Top-Out, Blank, IP66/67
- 253-SMB67-A4 Surface-Mount Box, 2-Port, 2-Left-In/2-Top-Out, Blank, IP66/67

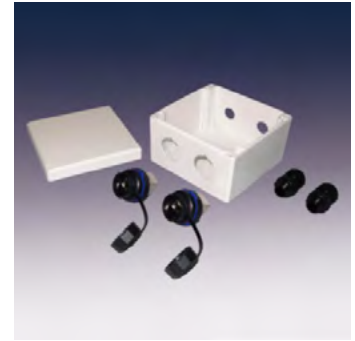
### ACCESSORIES

- 259-SLC01-F0C1 Cable Gland, M16, Plastic, 5-mm–10-mm Cable O.D., Simplex\*
- 259-SLC01-F0A1 Cable Gland, M16, Plastic, 2-mm–3-mm Cable O.D., Simplex\*\*
- 259-SLC01-F0A2 Cable Gland, M16, Plastic, 2-mm–3-mm Cable O.D., Duplex\*\*\*

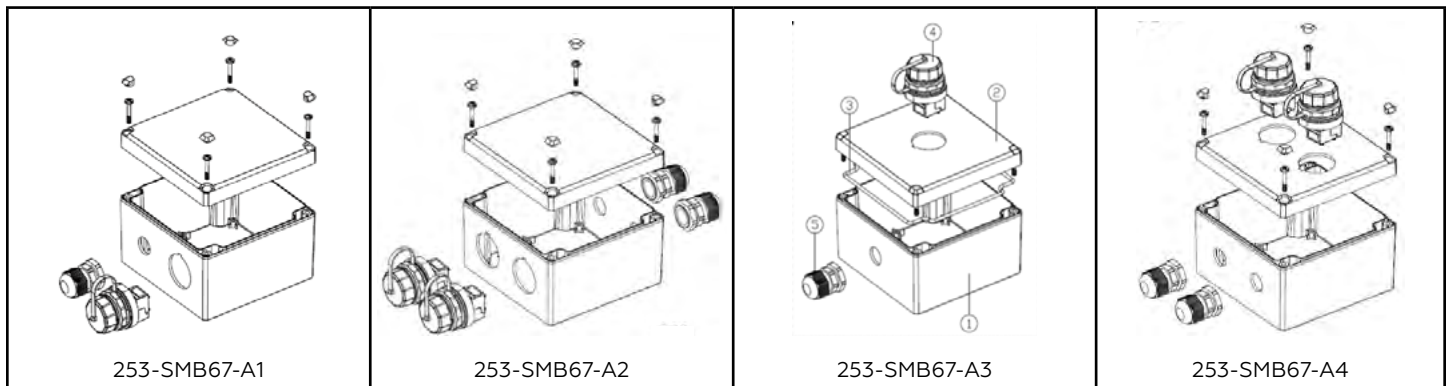
\* Recommended for round twisted-pair and optical fiber cables

\*\* Recommended for simplex round optical fiber cables

\*\*\* Recommended for duplex zipcord optical fiber cables

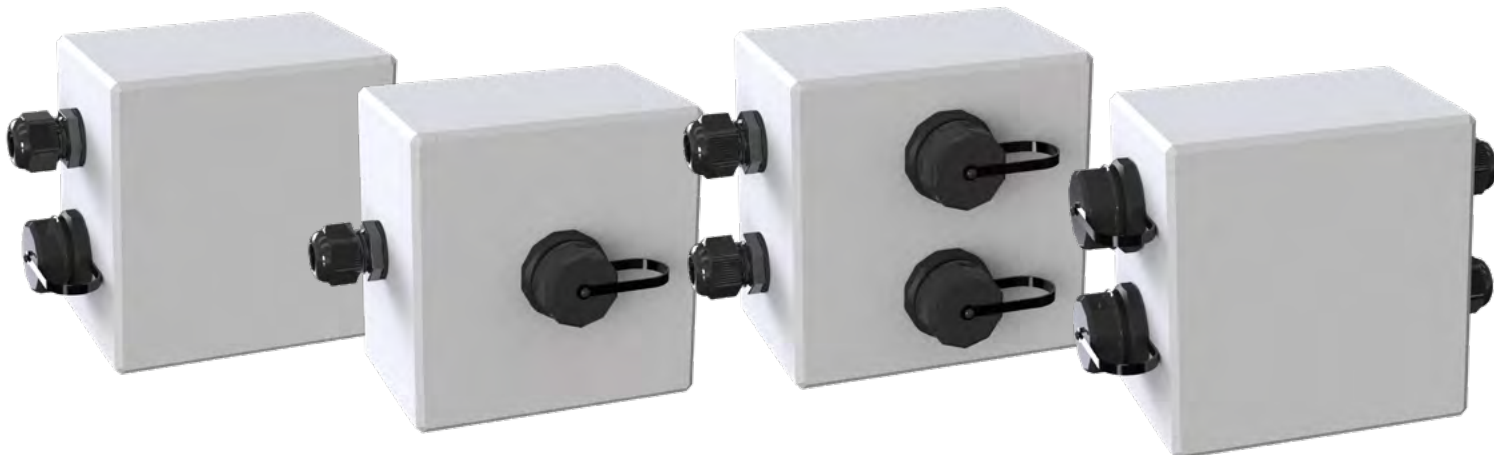


250-IOM68 Outlet Modules P161



### CHARACTERISTICS

- Compatibility: 250-IOM68 Outlet Modules.
- Material: ABS UL 94 V-0.
- Environmental protection: IP66/67.
- Compliance: IEC 60529; UL 1863.
- Cable gland IP rating: IP68.
- Cable gland cable size: 5 mm–10 mm O.D. round twisted-pair cables; 2 mm–3 mm O.D. round optical fiber cables; 2 mm–3 mm O.D. optical fiber zipcords.
- Dimensions: 122 mm × 120 mm × 80 mm (4.8 in × 4.7 in × 3.2 in) without outlets and glands.



INDUSTRIAL & HARSH-ENVIRONMENT SYSTEMS

# RUGGEDIZED PRODUCTS ▶ Ruggedized Field-Terminatable Plugs

## Category 6A and 8 Ruggedized Field-Terminatable Plugs

252-RMP02-A2A10	Modular Plug, 8P8C, CAT6A, STP, Ruggedized, Field-Terminatable, Pack of 10
252-RMP02-A2B10	Modular Plug, 8P8C, CAT6A, STP, Ruggedized, Field-Terminatable, Slim-Profile, Pack of 10
252-RMP02-A2C10	Modular Plug, 8P8C, CAT6A, STP, Ruggedized, Field-Terminatable, 90-Deg Variable Direction, Pack of 10
252-RMP02-B2A10	Modular Plug, 8P8C, CAT8.I, STP, Ruggedized, Field-Terminatable, Pack of 10



252-RMP02-A2A



252-RMP02-A2B



252-RMP02-A2C



252-RMP02-B2A

### CHARACTERISTICS

<p><b>252-RMP02-A2A</b></p> <p>Transmission performance: category 6A.</p> <p>Wiring schemes: T568A/T568B.</p> <p>Conductor gauge: solid: 22–26 AWG.</p> <p>Cable diameter: 5–9 mm.</p> <p>Termination: “toolless”.</p> <p>Re-termination limit: 5 times.</p> <p>Housing/screening: solid zinc alloy, “360°” coverage.</p> <p>Contacts: phosphor bronze, 50-µin gold plating</p> <p>Mating durability: Level 1, 750 mating cycles min.</p> <p>Current rating: 1.5 A.</p> <p>Dielectric withstanding voltage: 1000 V<sub>DC</sub>.</p> <p>Insulation resistance: 500 MOhm min.</p> <p>Contact resistance: 20 MOhm max.</p> <p>Environmental protection: IP20.</p> <p>Dimensions: 45 mm × 14 mm × 13.5 mm; (1.8 in × 0.6 in × 0.5 in).</p> <p>Compliance: IEC 60603-7; UL DUXR; IEEE 802.3bt (4PPoE).</p>	<p><b>252-RMP02-A2B</b></p> <p>Transmission performance: category 6A.</p> <p>Wiring schemes: T568A/T568B.</p> <p>Conductor gauge: solid: 22–26 AWG; stranded: 22–27 AWG.</p> <p>Cable diameter: 5–9 mm.</p> <p>Termination: “toolless”.</p> <p>Re-termination limit: 5 times.</p> <p>Housing/screening: solid zinc alloy, “360°” coverage.</p> <p>Contacts: phosphor bronze, 50-µin gold plating</p> <p>Mating durability: Level 1, 750 mating cycles min.</p> <p>Current rating: 1.5 A.</p> <p>Dielectric withstanding voltage: 1000 V<sub>DC</sub>.</p> <p>Insulation resistance: 500 MOhm min.</p> <p>Contact resistance: 20 MOhm max.</p> <p>Environmental protection: IP20.</p> <p>Dimensions: 48 mm × 12 mm × 12.6 mm; (1.9 in × 0.5 in × 0.5 in).</p> <p>Compliance: IEC 60603-7; UL DUXR; IEEE 802.3bt (4PPoE).</p>
<p><b>252-RMP02-A2C</b></p> <p>Transmission performance: category 6A.</p> <p>Wiring schemes: T568A/T568B.</p> <p>Conductor gauge: solid: 22–26 AWG; stranded: 22–27 AWG.</p> <p>Cable diameter: 5.5–9 mm.</p> <p>Termination: “toolless”.</p> <p>Re-termination limit: 5 times.</p> <p>Housing/screening: solid zinc alloy, “360°” coverage.</p> <p>Contacts: phosphor bronze, 50-µin gold plating</p> <p>Mating durability: Level 1, 750 mating cycles min.</p> <p>Current rating: 1.5 A.</p> <p>Dielectric withstanding voltage: 1000 V<sub>DC</sub>.</p> <p>Insulation resistance: 500 MOhm min.</p> <p>Contact resistance: 20 MOhm max.</p> <p>Cable entry direction: 90 ° to plug; eight 45° variable positions relative to plug plane.</p> <p>Environmental protection: IP20.</p> <p>Dimensions: 48 mm × 11.7 mm × 11.7 mm; (1.90 in × 0.45 in × 0.45 in).</p> <p>Compliance: IEC 60603-7; UL DUXR; IEEE 802.3bt (4PPoE).</p>	<p><b>252-RMP02-B2A</b></p> <p>Transmission performance: category 8 Class I.</p> <p>Wiring schemes: T568A/T568B.</p> <p>Conductor gauge: solid: 22–26 AWG; stranded: 27 AWG.</p> <p>Cable diameter: 6.0–8.5 mm.</p> <p>Termination: “toolless”.</p> <p>Re-termination limit: 5 times.</p> <p>Housing/screening: solid zinc alloy, “360°” coverage.</p> <p>Contacts: phosphor bronze, 50-µin gold plating</p> <p>Mating durability: Level 1, 750 mating cycles min.</p> <p>Current rating: 1.5 A.</p> <p>Dielectric withstanding voltage: 1000 V<sub>DC</sub>.</p> <p>Insulation resistance: 500 MOhm min.</p> <p>Contact resistance: 20 MOhm max.</p> <p>Cable entry direction: 90 ° to plug; eight 45° variable positions relative to plug plane.</p> <p>Environmental protection: IP20.</p> <p>Dimensions: 60 mm × 14.0 mm × 15.2 mm; (2.36 in × 0.55 in × 0.60 in).</p> <p>Compliance: IEC 60603-7; UL DUXR; IEEE 802.3bt (4PPoE).</p>

## DIN-RAIL PRODUCTS ► DIN-Rail Keystone Module Holders

## Stackable Holders

251-DKH01-A1

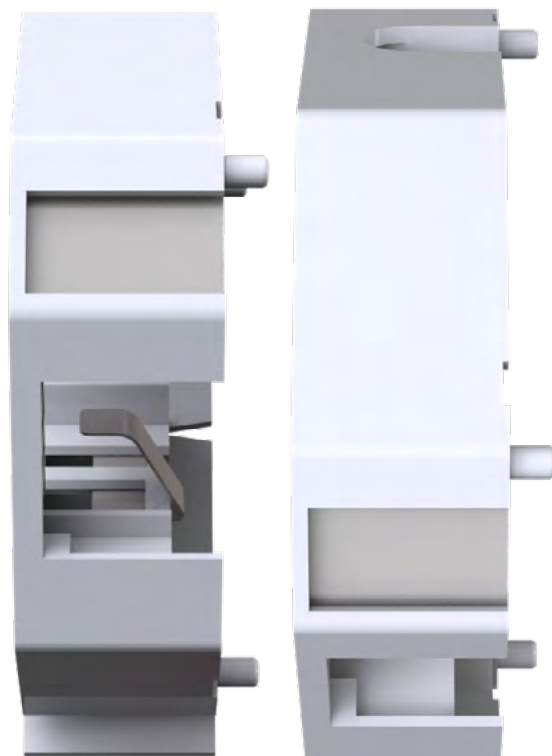
DIN-Rail Keystone Module Holder, 35-mm, Plastic, Stackable, Grounding, Labeling, One Left Cover, Blank

## CHARACTERISTICS

Compatibility:	all Vertical Cable's high-density keystone modules.
Compliance:	IEC/EN 60715; DIN 43880.
Mounting:	35-mm DIN rail; integral spring-loaded contact; horizontally stackable (one right cover at the end of the row).
Bonding/grounding:	integral spring clip.
Labeling:	paper insert with clear window.
Material:	(PC) polycarbonate.
Dimensions:	width: 18 mm (0.7 in) [1 DU] without covers; height: 60 mm (2.4 in); depth: 60 mm (2.4 in).

## ACCESSORIES

251-DKH01-A1-A	Left Cover for 251-DKH01-A1
251-DKH01-A1-B	Right Cover for 251-DKH01-A1



## DIN-RAIL PRODUCTS ► DIN-rail Keystone Modules

## Twisted-Pair Feed-Through Adapter

251-DCM01-A1B

DIN-Rail Feed-Through Adapter, CAT6a, STP, 35-mm, Grounding

## CHARACTERISTICS

Connector:	feed-through adapter (socket-to-socket); 8P8C; T568A/T568B.
Transmission performance:	CAT6a per ANSI/TIA-568.2-D; CAT6a per ISO/IEC 11801.
Screening:	solid zinc alloy, "360-deg" coverage.
Bonding/grounding:	integral spring clip.
Material:	(PC) polycarbonate.
Mounting:	35-mm DIN rail; integral clip; side-by-side stackable.
Mating durability:	Level 1, 750 mating cycles min
Environmental protection:	IP20; dust covers.
Compliance:	IEC/EN 60715; DIN 43880; IEEE 802.3bt (4PPoE).
Dimensions:	width: 18 mm (0.7 in) [1 DU]; height: 35 mm (1.4 in); depth: 26 mm (1.0 in).



DIN-RAIL PRODUCTS ▶ DIN-Rail Keystone Module Holders



DIN-RAIL PRODUCTS ▶ DIN-rail Keystone Module Box

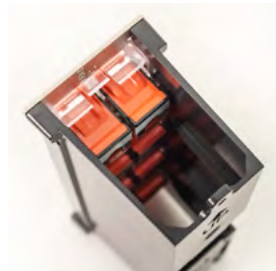
Distribution Box

251-DCN01-A8A

DIN-Rail Keystone Module Box, 35-mm, 8-position, Grounding, Swingable

CHARACTERISTICS

- Compatibility: all Vertical Cable's high-density keystone modules.
- Compliance: IEC/EN 60715.
- Mounting: 35-mm DIN rail; integral latching contacts; surface-mount option.
- Module tilt range:  $\pm 20^\circ$ .
- Capacity: eight positions.
- Bonding/grounding: internal spring contacts; external grounding conductor (length: 42 cm (16.5 in)).
- Labeling: port numbers (1 to 8), factory-marked; adhesive paper labels, custom labeling.
- Dimensions: width: 55 mm (2.2 in) [3 DU]; height: 153 mm (6 in) without latching clip; depth: 75 mm (3 in).



250-IOM68 Outlet Modules	P161	250-ITM68 Terminal Modules	P162	250-ICP68 Coupler Modules	P163
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# DIN-RAIL PRODUCTS ▶ DIN-Rail Modular Cassettes

## EZ Mount Series Cassette

268-EZM01-1A

DIN-Rail Modular Cassette, EZ Mount Series

EZ Mount Cassette	P72
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### DIN-Rail Connectivity Node

251-DCN01-B1B0

DIN-Rail Connectivity Node with Surface-Mount Option

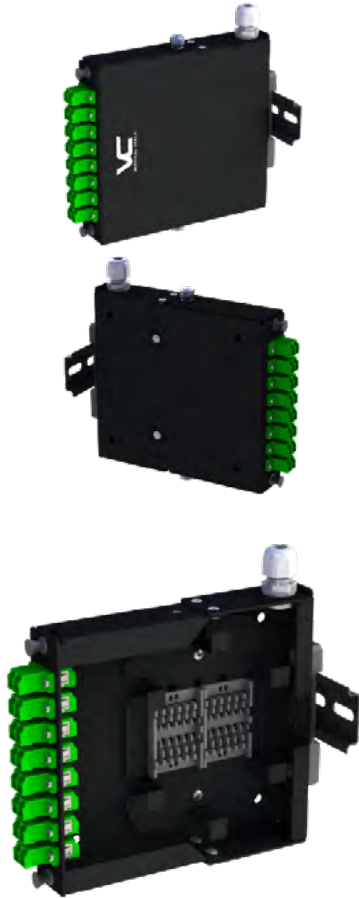
251-DCN01-B1B1

DIN-Rail Connectivity Node with DIN-Rail-Mount Option  
(Comes with DIN-Rail Clip × 1)

Kit includes: Base × 1; Cover × 1; FM stage × 1; Cable Tie × 2.
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### CHARACTERISTICS

- Compatibility:** all Vertical Cable 264-MAP and 264-LAP series adapter plates.
- Mounting:** left-hand/right-hand independent;  
surface, screw fastening;  
35-mm DIN rail, detachable DIN-rail clip.
- Materials:** aluminum alloy;  
black powder coating.
- Capacity:** one LGX adapter plate;  
up to 24 fibers (264-LAP series adapter plates);  
up to 6 keystone modules (264-MAP01-1A06 adapter plate);  
1 or 2 splice holders, 12 fibers per holder, 24 fibers total max;  
1 or 2 cable entry point adapters (see accessories).
- Cable management:** cable anchor point (bridge lance);  
fiber/splice management stage, removable;  
set of cable ties.
- Dimensions:** W: 30 mm (1.2 in) [2 DU], H: 150 mm (5.9 in),  
D: 140 mm (5.5 in).
- Weight:** 240 g (8.5 oz).
- Compliance:** IEC/EN 60715;  
DIN 43880;  
ANSI/TIA-568.3-D;  
GR-769;  
Directive 2011/65/EU Am. 2015/863/EU (RoHS2).
- DIN-rail clip:** material: fiberglass-reinforced nylon 66 (PA66, GF: 30 %);  
width: 35 mm;  
mounting: spring-loaded latch;  
compliance: Directive 2011/65/EU Am. 2015/863/EU (RoHS2).
- Environmental:** operating temperature: -10 °C–60 °C (14 °F–140 °F);  
storage temperature: -40 °C–70 °C (-40 °F–158 °F);  
operating humidity: 93 % RH max non-condensing.



264-LAP OF Adapter Plates	P74
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Plate materials:	aluminum alloy, black powder coating						
Plate dimensions:	60 mm × 30 mm (2.4 in × 1.2 in)						
Grommet material:	Thermoplastic Elastomer, TPE (UL 94 V-2)						
Opening size:		40 mm × 20 mm (1.6 in × 0.8 in)			cable O.D.: ≤8 mm (0.3 in)	cable O.D.: ≤12 mm (0.5 in)*	cable O.D.: ≤6.5 mm (0.25 in)
Gland form-factor:							M12/PG7
Gland material:							polyamide / neoprene



# DIN-RAIL PRODUCTS ▶ DIN-Rail Modular Cassettes

## DIN-Rail Connectivity Node

AVAILABLE Q1 2022

251-DCN01-B1-A

Cable Management/Connector Protection Bracket for 251-DCN01-B1B0

### CHARACTERISTICS

Compatibility:

251-DCN01-B1B0.  
left-hand/right-hand independent;  
surface, screw fastening.

Mounting:

Materials:

aluminum alloy;  
black powder coating.

Cable management:

cable anchor point (bridge lance);  
set of cable ties.

Dimensions:

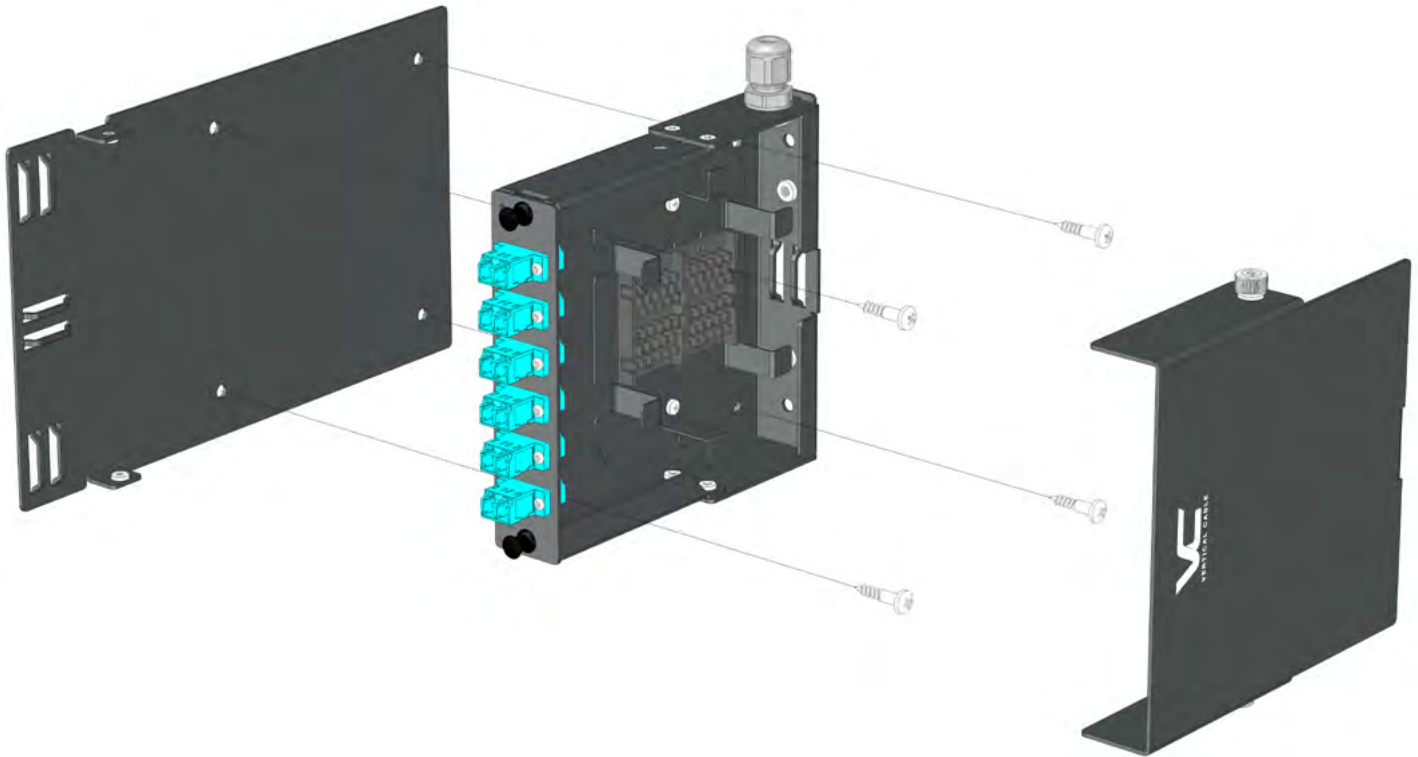
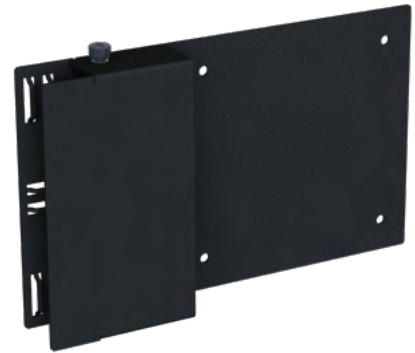
W: 225 mm (8.9 in), H: 135 mm (4.4 in), D: 32 mm (1.3 in).  
Weight: 75 g (2.6 oz).

Compliance:

Directive 2011/65/EU Am. 2015/863/EU (RoHS2).

Environmental:

operating temperature: -10 °C–60 °C (14 °F–140 °F);  
storage temperature: -40 °C–70 °C (-40 °F–158 °F);  
operating humidity: 93 % RH max non-condensing.



INDUSTRIAL & HARSH-ENVIRONMENT SYSTEMS

# DIN-RAIL PRODUCTS ▶ Equipment Mounting

## DIN-Rail to Equipment-Rack Adapter Bracket

251-ERA01B-2I

DIN-Rail to Equipment Rack Adapter Bracket, Foldable, 2-RMU, 8-in Depth

AVAILABLE Q4 2021

### CHARACTERISTICS

- Form-factor: 19-in rack/cabinet mounting standard (EIA-ECA-310-E).
- Capacity: up to 22 DU (385 mm (15.2 in)).
- Materials: 1.5-mm (16-GA) CRS; black powder coating.
- Equipment mounting: 35-mm DIN rail; 11 depth positions; 25-mm (1-in) steps; +50 mm (2 in) to -200 mm (8 in).
- Cable management: detachable cable management bars, front and rear, two levels; detachable plastic cable management rings.
- Bonding/grounding: two grounding conductor terminals.
- DIN rail: 35 mm; galvanized steel; 400-mm (16-in) wide (22 DU).
- Compliance: IEC/EN 60715; Directive 2011/65/EU Am. 2015/863/EU (RoHS2).
- Dimensions: width: 482.6 mm (19 in) flange-to-flange; 442 mm (17.4 in) frame; height: 88 mm (3.5 in) [2 RMU]; depth: 300 mm (12 in).
- Dimensions, packed: 450 mm × 90 mm × 100 mm; (17.7 in × 3.5 in × 4 in).
- Weight: 1.5 kg (3.3 lb).

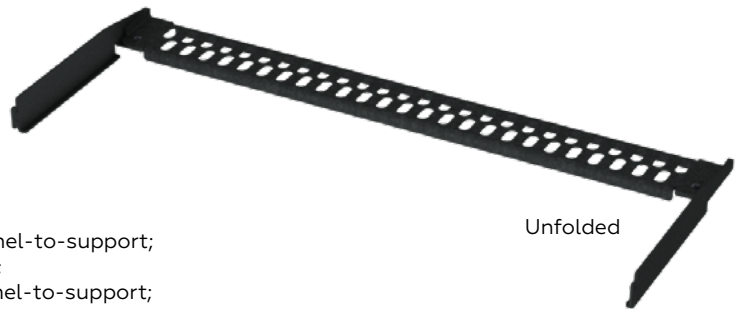


### ACCESSORIES

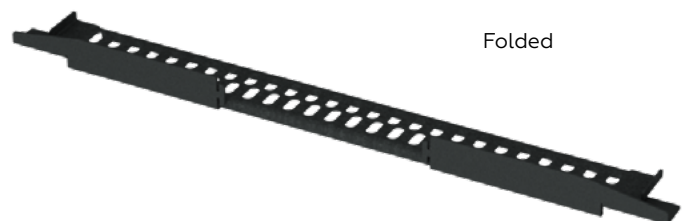
- 251-CMB012-A4 DIN-Rail to Equipment Rack Adapter Bracket, Cable Management Bar, General Purpose, 4-in Depth
- 251-CMB012-A6 DIN-Rail to Equipment Rack Adapter Bracket, Cable Management Bar, General Purpose, 6-in Depth
- 251-CMB012-A8 DIN-Rail to Equipment Rack Adapter Bracket, Cable Management Bar, General Purpose, 8-in Depth

### CHARACTERISTICS

- Materials: 1.5-mm (16-GA) CRS; black powder coating.
- Width: 410 mm (16.2 in).
- Height: 45 mm (1.75 in).
- Depth: 251-CMB012-A4: 100 mm ( 4 in) panel-to-support; 150 mm ( 6 in) full;  
251-CMB012-A6: 160 mm ( 6 in) panel-to-support; 200 mm ( 8 in) full;  
251-CMB012-A8: 200 mm ( 8 in) panel-to-support; 250 mm (10 in) full.
- Dimensions, packed: 445 mm × 45 mm × 25 mm; (17.5 in × 1.75 in × 1 in).
- Weight: 1.5 kg (3.3 lb).



Unfolded



Folded

# SUPPORT INFRASTRUCTURE ▶ Surface-Mount Equipment Brackets

## Field-Configurable Brackets

254-EMB01-B1B1	Surface-Mount Equipment Bracket, Field-Configurable, 19-in, 1-RMU
254-EMB01-B1B2	Surface-Mount Equipment Bracket, Field-Configurable, 19-in, 2-RMU
254-EMB01-B1B4	Surface-Mount Equipment Bracket, Field-Configurable, 19-in, 4-RMU

AVAILABLE Q3 2021

AVAILABLE Q4 2021

### CHARACTERISTICS

Materials:	2-mm (14-GA) CRS; black powder coating.
Capacity:	254-EMB01-B1B1: 1 RMU; 254-EMB01-B1B2: 2 RMU; 254-EMB01-B1B4: 4 RMU; two mounting flange levels, 260 mm (10.2 in).
Equipment mounting:	eight depth levels, 1-in step; max equipment unit depth: 445 mm (17.5 in); M6 cage nuts/screws.
Width:	520 mm (20.5 in).
Height:	254-EMB01-B1B1: 60 mm (2.4 in); 254-EMB01-B1B2: 100 mm (4 in); 254-EMB01-B1B4: 190 mm (7.5 in).
Depth:	min: 300 mm (12 in); max: 470 mm (18.5 in).
Dimensions, packed:	530 mm × 60 mm × 35 mm; (21 in × 2.4 in × 1.4 in).
Weight:	254-EMB01-B1B1: 2 kg (4.4 lb); 254-EMB01-B1B2: 3 kg (6.6 lb); 254-EMB01-B1B4: 5 kg (11 lb).



INDUSTRIAL & HARSH-ENVIRONMENT SYSTEMS

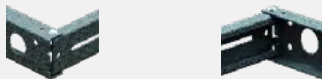
#### Swingable at the base plane

Slides with two different ends:

1. "Blunt" end allows to fix the slide at 90 degrees to the base/wall plane.
2. "Fork" end allows slide to swing from 0 to 180 degrees.

Both options are independent and can be used in combination with other options.

90-degree swing angle



180-degree swing angle



#### Swingable at the equipment mounting plane

Arms with two different ends:

1. Integrated flange placed at a fixed 90-degree angle.
2. Hinge mechanism allowing to affix a swingable flange.

Both options are independent and can be used in combination with other options.

Fixed 90-degree flange



Swingable 120-degree flange



#### Two flange depth levels

Arms are equipped with two flanges increasing spatial equipment mounting density and allowing to create various options for equipment mounting.

#### Hex socket screw mounting standard

All screws used in the design have hex socket heads and a hex wrench is provided with the bracket that can be securely stored in the special openings in the bracket.

#### Cage nut mounting standard

Both bracket assembling and equipment mounting fasteners are based on cage nuts.



# REFERENCE GUIDE

## Environmental Classification (MICE)

Telecommunications systems may be installed in different environments ranging from a commercial office building with stable ambient temperature and humidity and not affected by powerful sources of EMI to a factory floor or outside plant with multiple disturbing factors capable to compromise performance of the telecommunications equipment.

MICE classification provides a tool for characterization of various environments addressing four fundamental areas of concern:

M: mechanical;

I: ingress;

C: climatic/chemical;

E: electromagnetic.

Each MICE class is provided with a numerical index characterizing the severity of the factor (there are three levels of severity), e.g., M<sub>3</sub>I<sub>2</sub>C<sub>1</sub>E<sub>2</sub>.

Complete list of parameters related to telecommunications cabling systems can be found in ANSI/TIA-568-C.0 Annex F.

M	I	C	E
<ul style="list-style-type: none"> <li>• Shock/bump (peak acceleration)</li> <li>• Vibration (displacement amplitude)</li> <li>• Vibration (acceleration amplitude)</li> <li>• Tensile force</li> <li>• Crush</li> <li>• Impact</li> <li>• Bending, flexing and torsion</li> </ul>	<ul style="list-style-type: none"> <li>• Particulate ingress (dia. max)</li> <li>• Immersion</li> </ul>	<ul style="list-style-type: none"> <li>• Ambient temperature</li> <li>• Rate of change of temperature</li> <li>• Humidity</li> <li>• Solar radiation</li> <li>• Liquid pollution (contaminants)</li> <li>• Sodium chloride (salt/sea water)</li> <li>• Oil (dry-air concentration)</li> <li>• Sodium stearate (soap)</li> <li>• Detergent</li> <li>• Conductive materials</li> <li>• Gaseous pollution (contaminants)</li> <li>• Hydrogen sulphide</li> <li>• Sulphur dioxide</li> <li>• Sulphur trioxide</li> <li>• Chlorine wet (&gt;50 % humidity)</li> <li>• Chlorine dry (&lt;50 % humidity)</li> <li>• Hydrogen chloride</li> <li>• Hydrogen fluoride</li> <li>• Ammonia</li> <li>• Oxides of Nitrogen</li> <li>• Ozone</li> </ul>	<ul style="list-style-type: none"> <li>• Electrostatic discharge – Contact</li> <li>• Electrostatic discharge – Air</li> <li>• Radiated RF – AM</li> <li>• Conducted RF</li> <li>• EFT/B (comms)</li> <li>• Surge (transient ground potential difference) – signal, line to earth</li> <li>• Magnetic Field (50/60 Hz)</li> <li>• Magnetic Field (60 Hz–20 kHz)</li> </ul>

ADDITIONAL MATERIALS

## REFERENCE GUIDE ► IP Code Classification

The IP Code, defined by IEC 60259 standard, previously called "International Protection Code" and sometimes incorrectly "Ingress Protection Code", classifies and rates the degree of protection provided by equipment enclosures (mechanical and electrical) against ingress of solid objects (e.g., dust, wires, tools, etc.) and liquid substances (e.g., water), and accidental operator contact (access to hazardous parts).

IP code consists of "IP" prefix and four symbols, last two of them are optional:

IP	D	D	L	L
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Where information for one of the positions is unavailable or inapplicable it is replaced with "X", e.g., IPX6.

A higher class implies compliance to the requirements of the lower classes.

In certain situations, classes may be achieved independently, as a result the code may be represented by a combined notation, e.g., IP67/IP68.

1 <sup>st</sup> Position			
	Equipment Protection	Operator Protection	
0	No protection	No protection	
1	Protection against solid object larger than 50 mm (2 in)	Protection against accidental contact with hand	
2	Protection against solid object larger than 12 mm (0.5 in)	Protection against accidental contact with finger	
3	Protection against solid object larger than 2.5 mm (0.1 in)	Protection against accidental contact with tools and wires	
4	Protection against solid object larger than 1 mm (0.05 in)	Protection against accidental contact with fine tools and wires	
5	Protection against dust, limited ingress (no harmful deposits)	Protection against accidental contact with fine wires	
6	Complete protection against dust	Complete protection against contact	
2 <sup>nd</sup> Position			
0	No protection		
1	Protection against vertically falling drops of water (e.g., condensation)		
2	Protection against vertically falling drops of water up to 15 ° from the vertical		
3	Protection against spraying water at up to 60 ° from the vertical		
4	Protection against splashing water from all directions		
4K*	Protection against splashing water at increased pressure from all directions (limited ingress permitted)		
5	Protection against jets of water from all directions (limited ingress permitted)		
6	Protection against strong jets of water (limited ingress permitted)		
6K*	Protection against strong jets of water at increased pressure (limited ingress permitted)		
7	Protection against the effects of temporary immersion up to 1 m (3 ft)		
8	Protection against the effects of temporary immersion beyond 1 m (3 ft)		
9K*	Protection against cleaning jet of high-pressure water/vapor		
* Automotive equipment			
3 <sup>rd</sup> Position		4 <sup>th</sup> Position	
A	Protection against accidental contact with hand	H	High-voltage equipment
B	Protection against accidental contact with finger	M	Device moving during water test
C	Protection against accidental contact with tools	S	Device standing still during water test
D	Protection against accidental contact with wires	W	Weather conditions

## REFERENCE GUIDE ► IK Code Classification

IK Code (impact protection) specifies degrees of protection provided by equipment enclosures (mechanical and electrical) against external mechanical impacts in accordance with IEC 62262 and IEC 60068-2-75.

00	Not protected		
01	Protected against 0.14-J impact. Equivalent to impact of 0.25-kg mass dropped from 56 mm above impacted surface.	06	Protected against 1-J impact. Equivalent to impact of 0.25-kg mass dropped from 400 mm above impacted surface.
02	Protected against 0.2-J impact. Equivalent to impact of 0.25-kg mass dropped from 80 mm above impacted surface.	07	Protected against 2-J impact. Equivalent to impact of 0.5-kg mass dropped from 400 mm above impacted surface.
03	Protected against 0.35 J impact. Equivalent to impact of 0.25-kg mass dropped from 140 mm above impacted surface.	08	Protected against 5-J impact. Equivalent to impact of 1.7-kg mass dropped from 300 mm above impacted surface.
04	Protected against 0.5-J impact. Equivalent to impact of 0.25-kg mass dropped from 200 mm above impacted surface.	09	Protected against 10-J impact. Equivalent to impact of 5-kg mass dropped from 200 mm above impacted surface.
05	Protected against 0.7-J impact. Equivalent to impact of 0.25-kg mass dropped from 280 mm above impacted surface.	10	Protected against 20-J impact. Equivalent to impact of 5-kg mass dropped from 400 mm above impacted surface.

## REFERENCE GUIDE ► NEMA Enclosure Type Classification

In the United States the main document that defines the levels of enclosure protection, ANSI/NEMA 250-2020, "Enclosures for Electrical Equipment (1000 Volts Maximum)" is published and maintained by National Electrical Manufacturers Association. Tables below provide a digest of definitions of the NEMA protection types.

Type	Non-Hazardous Locations
1	Enclosures intended for indoor use. Must provide the following: <ul style="list-style-type: none"> <li>• protection to personnel against access to hazardous parts;</li> <li>• protection of the equipment inside the enclosure against ingress of solid foreign objects (falling dirt).</li> </ul>
2	Enclosures intended for indoor use. Must provide the following: <ul style="list-style-type: none"> <li>• protection to personnel against access to hazardous parts;</li> <li>• protection of the equipment inside the enclosure against ingress of solid foreign objects (falling dirt).</li> <li>• protection of the equipment inside the enclosure against ingress of water (dripping and light splashing).</li> </ul>
3	Enclosures intended for either indoor or outdoor use. Must provide the following: <ul style="list-style-type: none"> <li>• protection to personnel against access to hazardous parts;</li> <li>• protection of the equipment inside the enclosure against ingress of solid foreign objects (falling dirt and windblown dust);</li> <li>• protection of the equipment inside the enclosure against ingress of water (rain, sleet, snow);</li> <li>• resilience to damage by the external formation of ice on the enclosure.</li> </ul>
3R	Enclosures intended for either indoor or outdoor use. Must provide the following: <ul style="list-style-type: none"> <li>• protection to personnel against access to hazardous parts;</li> <li>• protection of the equipment inside the enclosure against ingress of solid foreign objects (falling dirt);</li> <li>• protection of the equipment inside the enclosure against ingress of water (rain, sleet, snow);</li> <li>• resilience to damage by the external formation of ice on the enclosure.</li> </ul>
3S	Enclosures intended for either indoor or outdoor use. Must provide the following: <ul style="list-style-type: none"> <li>• protection to personnel against access to hazardous parts;</li> <li>• protection of the equipment inside the enclosure against ingress of solid foreign objects (falling dirt and windblown dust);</li> <li>• protection of the equipment inside the enclosure against ingress of water (rain, sleet, snow);</li> <li>• external mechanism(s) remain operable when ice laden.</li> </ul>
3X	Enclosures intended for either indoor or outdoor. Must provide the following: <ul style="list-style-type: none"> <li>• protection to personnel against access to hazardous parts;</li> <li>• protection of the equipment inside the enclosure against ingress of solid foreign objects (falling dirt and windblown dust);</li> <li>• protection of the equipment inside the enclosure against ingress of water (rain, sleet, snow);</li> <li>• protection against corrosion;</li> <li>• resilience to damage by the external formation of ice on the enclosure.</li> </ul>

## REFERENCE GUIDE ► NEMA Enclosure Type Classification (continued)

3RX	<p>Enclosures intended for either indoor or outdoor use. Must provide the following:</p> <ul style="list-style-type: none"> <li>• protection to personnel against access to hazardous parts;</li> <li>• protection of the equipment inside the enclosure against ingress of solid foreign objects (falling dirt);</li> <li>• protection of the equipment inside the enclosure against ingress of water (rain, sleet, snow);</li> <li>• protection against corrosion;</li> <li>• resilience to damage by the external formation of ice on the enclosure.</li> </ul>
3SX	<p>Enclosures intended for either indoor or outdoor use. Must provide the following:</p> <ul style="list-style-type: none"> <li>• protection to personnel against access to hazardous parts;</li> <li>• protection of the equipment inside the enclosure against ingress of solid foreign objects (falling dirt and windblown dust);</li> <li>• protection of the equipment inside the enclosure against ingress of water (rain, sleet, snow);</li> <li>• protection against corrosion;</li> <li>• external mechanism(s) remain operable when ice laden.</li> </ul>
4	<p>Enclosures intended for either indoor or outdoor use. Must provide the following:</p> <ul style="list-style-type: none"> <li>• protection to personnel against access to hazardous parts;</li> <li>• protection of the equipment inside the enclosure against ingress of solid foreign objects (falling dirt and windblown dust);</li> <li>• protection of the equipment inside the enclosure against ingress of water (rain, sleet, snow, splashing water, hose-directed water);</li> <li>• resilience to damage by the external formation of ice on the enclosure.</li> </ul>
4X	<p>Enclosures intended for either indoor or outdoor use. Must provide the following:</p> <ul style="list-style-type: none"> <li>• protection to personnel against access to hazardous parts;</li> <li>• protection of the equipment inside the enclosure against ingress of solid foreign objects (windblown dust);</li> <li>• protection of the equipment inside the enclosure against ingress of water (rain, sleet, snow, splashing water, hose-directed water);</li> <li>• protection against corrosion;</li> <li>• resilience to damage by the external formation of ice on the enclosure.</li> </ul>
5	<p>Enclosures intended for indoor use. Must provide the following:</p> <ul style="list-style-type: none"> <li>• protection to personnel against access to hazardous parts;</li> <li>• protection of the equipment inside the enclosure against ingress of solid foreign objects (falling dirt, settling airborne dust, lint, fibers, flying particles);</li> <li>• protection of the equipment inside the enclosure against ingress of water (dripping and light splashing).</li> </ul>
6	<p>Enclosures intended for either indoor or outdoor use. Must provide the following:</p> <ul style="list-style-type: none"> <li>• protection to personnel against access to hazardous parts;</li> <li>• protection of the equipment inside the enclosure against ingress of solid foreign objects (falling dirt);</li> <li>• protection of the equipment inside the enclosure against ingress of water (hose-directed water, entry of water during occasional temporary submersion at a limited depth);</li> <li>• resilience to damage by the external formation of ice on the enclosure.</li> </ul>
6P	<p>Enclosures intended for either indoor or outdoor use. Must provide the following:</p> <ul style="list-style-type: none"> <li>• protection to personnel against access to hazardous parts;</li> <li>• protection of the equipment inside the enclosure against ingress of solid foreign objects (falling dirt);</li> <li>• protection of the equipment inside the enclosure against ingress of water (hose-directed water, entry of water during prolonged submersion at a limited depth);</li> <li>• protection against corrosion;</li> <li>• resilience to damage by the external formation of ice on the enclosure.</li> </ul>
12	<p>Enclosures without knockouts intended for indoor use. Must provide the following:</p> <ul style="list-style-type: none"> <li>• protection to personnel against access to hazardous parts;</li> <li>• protection of the equipment inside the enclosure against ingress of solid foreign objects (falling dirt, circulating dust, lint, fibers, flying particles);</li> <li>• protection of the equipment inside the enclosure against ingress of water (dripping and light splashing).</li> </ul>
12K	<p>Enclosures with knockouts intended for indoor use. Must provide the following:</p> <ul style="list-style-type: none"> <li>• protection to personnel against access to hazardous parts;</li> <li>• protection of the equipment inside the enclosure against ingress of solid foreign objects (falling dirt, circulating dust, lint, fibers, flying particles);</li> <li>• protection of the equipment inside the enclosure against ingress of water (dripping and light splashing).</li> </ul>
13	<p>Enclosures intended for indoor use. Must provide the following:</p> <ul style="list-style-type: none"> <li>• protection to personnel against access to hazardous parts;</li> <li>• protection of the equipment inside the enclosure against ingress of solid foreign objects (falling dirt, circulating dust, lint, fibers, flying particles);</li> <li>• protection of the equipment inside the enclosure against ingress of water (dripping and light splashing);</li> <li>• protection against spraying, splashing, seepage of oil and non-corrosive coolants.</li> </ul>

Pressure Wash (PW) Enclosures.

Constructed for exterior cleaning with high-pressure power washers and tested in accordance with Section 5.15 of NEMA 250.

The PW ancillary rating may be appended only to the following ratings: 3, 3X, 3S, 3SX, 4, 4X, 6, 6P, 12, 12X, 13.

## REFERENCE GUIDE ► IEC IP Code vs. NEMA Types Comparison

Type	Hazardous Locations
7	Explosion-proof enclosures demonstrating compliance with the requirements of ANSI/UL 1203 for use in hazardous (classified) locations classified as Class I, Division 1, Groups A, B, C, or D as defined in ANSI/NFPA 70. Designed to contain an internal explosion without causing an external hazard.
9	Dust-ignition-proof enclosures demonstrating compliance with the requirements of ANSI/UL 1203 for use in hazardous (classified) locations classified as Class II, Division 1, Groups E, F, or G as defined in ANSI/NFPA 70. Designed to prevent the ignition of combustible dust.

### IEC IP Code vs. NEMA Types Comparison

IP Code (IEC 60259) if compared to NEMA 250 Types does not specify degrees of protection against mechanical damage, explosions, moisture, corrosion, fungus or vermin. NEMA 250 includes requirements for testing environmental conditions such as corrosion, rust, icing, oil, and coolants. For this reason, and because the test procedures and criteria for other characteristics that may be considered equivalent are not identical, the IEC 60259 classes cannot be exactly equated with the NEMA 250 Types. It should be also noted that since the NEMA Type specifications meet or exceed those of IEC 60259, conversion is acceptable in one direction only.

NEMA Type	IEC IP Code																	
	0	0	1	1	2	2	3	3	4	4	5	5	6	6	7	7	8	8
1	■	■	■	□	■	□	□	□	□	□	□	□	□	□	□	□	□	□
2	■	■	■	■	■	■	□	□	□	□	□	□	□	□	□	□	□	□
3, 3X, 3S, 3SX	■	■	■	■	■	■	■	□	■	■	■	■	□	□	□	□	□	□
3R, 3RX	■	■	■	■	■	■	□	■	□	■	□	□	□	□	□	□	□	□
4, 4X	■	■	■	■	■	■	■	■	■	■	■	■	■	■	□	□	□	□
5	■	■	■	■	■	■	■	■	■	□	■	□	□	□	□	□	□	□
6	■	■	■	■	■	■	■	■	■	■	■	■	■	■	□	■	□	□
6P	■	■	■	■	■	■	■	■	■	■	■	■	■	■	□	■	□	■
12, 12K, 13	■	■	■	■	■	■	■	■	■	■	■	■	□	□	□	□	□	□

- ANSI/NEMA 250 Type specifications exceed those of IEC 60259.
- ANSI/NEMA 250 specifications meet those of IEC 60259.

ADDITIONAL MATERIALS

## SAFER SHIPPING with Vertical Cable



**Server and Network cabinets are shipped in wooden crates.**

**Enclosures are shipped in heavy-duty cartons provided with extra protection.**



**High-quality cardboard boxes for category cables are moisture-resistant and can withstand jumping on them of a 220-pound person. Watch the crush-test video here:**



**Cables on spools are guarded with a three-ply protective wrapping.**



# TAA-Compliant Products

	Description	Country of Origin
<b>BULK CABLE</b>		
057-XXX/S/P/XX	CAT5E Shielded (F/UTP), Plenum-Rated (CMP)	Taiwan
151 Series	CAT5E Unshielded (UTP), Riser-Rated (CMR)	South Korea
156, 157 Series	CAT5E Unshielded (UTP), Plenum-Rated (CMP)	USA
161 Series	CAT6 Unshielded (UTP), Riser-Rated (CMR)	South Korea
165 Series	CAT6a Shielded (F/UTP), Plenum-Rated (CMP)	Taiwan
066 Series	CAT6 Unshielded (UTP), Plenum-Rated (CMP)	Taiwan
166, 167 Series	CAT6 Unshielded (UTP), Plenum-Rated (CMP)	USA
168 Series	CAT6 Shielded (F/UTP), Plenum-Rated (CMP)	Taiwan
176 Series	CAT6a Unshielded (UTP), Plenum-Rated (CMP)	USA
214-XXXX/P/XX	Access Control Cable Plenum-Rated (CMP)	USA
309 Series	Audio / Security Cable CL3R and CL3P	USA
315 Series	Fire Alarm Cable (All 315 Series except for 315-224/R/5RD and 315-224/R/5RDCP)	USA
<b>V-MAX KEYSTONE JACKS</b>		
350-SERIES	CAT3 VOICE KEYSTONE INSERTS	Taiwan
351-SERIES	CAT5E DATA KEYSTONE INSERTS	Taiwan
301-J2630/S	CAT5E SHIELDED DATA KEYSTONE INSERTS	Taiwan
352-SERIES	CAT6 DATA KEYSTONE INSERTS	Taiwan
302-J2631/S	CAT6 SHIELDED DATA KEYSTONE INSERTS	Taiwan
353-SERIES	CAT6a DATA KEYSTONE INSERTS	Taiwan
303-J2637/C6AS	CAT6a SHIELDED DATA KEYSTONE INSERTS	Taiwan
<b>METAL PRODUCTS</b>		
047-WPR-0207	1-PORT SMB WITH CAT5E JACK	USA
044-2393/DS1U	1-PORT SMB WITH CAT5E JACK	Taiwan
044-2394/DS/2U	2-PORT SMB WITH CAT5E JACK	Taiwan
<b>TOOLS</b>		
078-2150	I-Punh Tool for Vertical Cable V-Max Keystone Jacks	Taiwan
078-2155/S	I-Punh Tool for Vertical Cable Shielded Keystone Jacks	Taiwan
078-1025	Impact punch down tool with 110/88/66 blade	Taiwan
078-1025/B	110/88/66 Replacement Blade for Impact Punch Down Tool	Taiwan
078-1025/B210	Krone Type Replacement Blade for Impact Punch Down Tool	Taiwan
078-1024	Cable cutter – Steel Curve Blade	Taiwan
<b>BRACKETS</b>		
022-DWB/S	Single Gang Dry Wall Bracket for US Type Face Plate – Steel	Taiwan
022-DWB/1G	Single Gang Dry Wall Bracket for US Type Face Plate – Low Voltage Class 2	Taiwan
022-DWb/2G	Double Gang Dry Wall Bracket for US Type Face Plate – Low Voltage Class 2	Taiwan
<b>RACEWAY</b>		
045 Series	Surface Raceway Products	USA

## What is TAA Compliance?

As outlined by the Trade Agreement Act (1979), US Government and affiliated entities with federal contracts are required to purchase only “end products” made or substantially transformed within the United States or other TAA “Designated Countries.” “End products” are defined by the Act as “those articles, materials and supplies to be acquired for public use.” The TAA requires suppliers to certify that each “end product” meets these requirements.

The Trade Agreement Act (TAA) is intended to foster the growth and maintenance of a fair and open trading system. TAA compliance requires that the U.S. Government (including GSA) acquires only U.S. – made or certain “designated country” end products. This means that all products must be either manufactured or “substantially transformed” in the United States or a TAA compliant country.

In the situation where a product is assembled or comprised of components from several different countries, the guideline applies to the last country that the product is in before imported to the United States. At least 50% of the production must be completed by a TAA compliant country.

Read more at [GSA.gov](http://GSA.gov)



# TOOLS COMPATIBILITY

	Description	Compatible VC tools
<b>PLUGS</b>		
009-007/64R-100	RJ11 6P 4C PLUGS	078-1017, 078-2152/EZC, 078-2154/EZC/S
009-008/66R-100	RJ12 PLUG, 6P 6C PLUGS	078-1017, 078-2152/EZC, 078-2154/EZC/S
009-102444R-100	RJ22 PLUG, 4 POSITION FOR PHONE HAND-SET	078-1017
011-016-100	CAT5E RJ45 MODULAR PLUG	078-1016, 078-1017
011-017-100	CAT5E RJ45 SHIELDED MODULAR PLUG	078-1016, 078-1017
011-018/EZF-100	CAT5E EASY FEED RJ45 MOD. PLUG	078-2152/EZC
011-019/EZF-100	CAT5E EASY FEED RJ45 SHIELDED PLUG	078-2152/EZC
011-020G-100	CAT5E SHIELDED PLUG W/ GROUND CLIP/HOOK	078-1016, 078-1017
012-021-100	CAT6/CAT6a RJ45 SHIELDED PLUG	078-1017, 078-2154/EZC/S
012-022-100	CAT6 RJ45 MODULAR PLUG (NO LOAD BAR)	078-1016, 078-1017
012-023/EZF-100	CAT6 EASY FEED RJ45 MOD. PLUG	078-2152/EZC
012-024/10G	CAT6a RJ45 SHIELD 10G MOD. PLUG	N/A
012-025/EZF-100	CAT6a EASY FEED RJ45 MOD. PLUG	078-2152/EZC
012-026/EZF-100	CAT6a EASY FEED SHIELDED RJ45 PLUG	078-2154/EZC/S
<b>KEYSTONE JACKS</b>		
350-SERIES	CAT3 VOICE KEYSTONE INSERTS	078-1025, 078-1028, 078-2150
351-SERIES	CAT5E DATA KEYSTONE INSERTS	078-1025, 078-1028, 078-2150
301-J2630/S	CAT5E SHIELDED DATA KEYSTONE INSERTS	078-1016, 078-1017, 078-2155/S
352-SERIES	CAT6 DATA KEYSTONE INSERTS	078-1025, 078-1028, 078-2150
302-J2631/S	CAT6 SHIELDED DATA KEYSTONE INSERTS	078-1016, 078-1017, 078-2155/S
353-SERIES	CAT6a DATA KEYSTONE INSERTS	078-1025, 078-1028, 078-2150
303-J2637/C6AS	CAT6a SHIELDED DATA KEYSTONE INSERTS	078-1016, 078-1017, 078-2155/S
<b>MOUNT BOXES</b>		
038-351IV	1-PORT SMB WITH CAT5E JACK	078-1025, 078-1028, 078-1988K (110 TOOL PREFERRED)
038-352WH	1-PORT SMB WITH CAT5E JACK	078-1025, 078-1028, 078-1988K (110 TOOL PREFERRED)
038-354IV	2-PORT SMB WITH CAT5E JACK	078-1025, 078-1028, 078-1988K (110 TOOL PREFERRED)
038-355WH	2-PORT SMB WITH CAT5E JACK	078-1025, 078-1028, 078-1988K (110 TOOL PREFERRED)
038-356IV	1-PORT SMB WITH CAT6 JACK	078-1025, 078-1028, 078-1988K (110 TOOL PREFERRED)
038-357WH	1-PORT SMB WITH CAT6 JACK	078-1025, 078-1028, 078-1988K (110 TOOL PREFERRED)
038-358IV	2-PORT SMB WITH CAT6 JACK	078-1025, 078-1028, 078-1988K (110 TOOL PREFERRED)
038-359WH	2-PORT SMB WITH CAT6 JACK	078-1025, 078-1028, 078-1988K (110 TOOL PREFERRED)
038-C6A/1P/WH	CAT6a 1 PORT SMB SHIELDED	078-1025, 078-1028, 078-1988K (110 TOOL PREFERRED)
038-C6A/2P/WH	CAT6a 2 PORT SMB SHIELDED	078-1025, 078-1028, 078-1988K (110 TOOL PREFERRED)
<b>JUNCTION BOXES</b>		
040-371/C5J/WH	CAT5E JUNCTION BOX - SPLICE BOX	078-1025, 078-1028, 078-1988K (110 TOOL PREFERRED)
040-372/C6J/WH	CAT6 JUNCTION BOX - SPLICE BOX	078-1025, 078-1028, 078-1988K (110 TOOL PREFERRED)
040-373/C5J/S	CAT5E JUNCTION BOX - SPLICE BOX	078-1025, 078-1028, 078-1988K (110 TOOL PREFERRED)
040-374/C6J/S	CAT6 JUNCTION BOX - SPLICE BOX	078-1025, 078-1028, 078-1988K (110 TOOL PREFERRED)

ADDITIONAL MATERIALS

	Description	Compatible VC tools
<b>PATCH PANELS</b>		
041-370M	CAT5E 12 PORT PANEL - MINI TYPE - 110 IDC	078-1025, 078-1028
041-371/12	CAT5E 12 PORT PATCH PANEL - 110 IDC	078-1025, 078-1028
041-372/24	CAT5E 24 PORT PATCH PANEL - 110 IDC	078-1025, 078-1028
041-372/S/24	CAT5E 24 PORT SHIELDED PATCH PANEL - KRONE IDC	(078-1025+078-1025/B210), 078-1988K
041-373/48	CAT5E 48 PORT PATCH PANEL - 110 IDC	078-1025, 078-1028
041-373/S/48	CAT5E 48 PORT SHIELDED PATCH PANEL - KRONE IDC	(078-1025+078-1025/B210), 078-1988K
041-375/96	CAT5E 96 PORT PATCH PANEL - 110 IDC	078-1025, 078-1028
042-2134	CAT6 12 PORT PANEL - MINI TYPE - 110 IDC	078-1025, 078-1028
042-376/12	CAT6 12 PORT PATCH PANEL - 110 IDC	078-1025, 078-1028
042-377/24	CAT6 24 PORT PATCH PANEL - 110 IDC	078-1025, 078-1028
042-377/S/24	CAT6 24 PORT SHIELDED PATCH PANEL - KRONE TYPE	(078-1025+078-1025/B210), 078-1988K
042-378/48	CAT6 48 PORT PATCH PANEL - 110 IDC	078-1025, 078-1028
042-378/S/48	CAT6 48 PORT SHIELDED PATCH PANEL - KRONE TYPE	(078-1025+078-1025/B210), 078-1988K
042-379/96	CAT6 96 PORT PATCH PANEL - 110 IDC	078-1025, 078-1028
042-C6A/24	CAT6a 24 PORT SHIELDED PATCH PANEL - KRONE TYPE	(078-1025+078-1025/B210), 078-1988K
042-C6A/48	CAT6a 48 PORT SHIELDED PATCH PANEL - KRONE TYPE	(078-1025+078-1025/B210), 078-1988K
<b>COAX CONNECTORS</b>		
083-1040/B	RG59 BNC CONNECTOR - TWIST TYPE	NO TOOL REQUIRED
083-1040/CR/B	RG59 BNC CONNECTOR - CRIMP TYPE	N/A
083-1041/CP/S	RG6 STANDARD F CONNECTOR - COMPRESSION TYPE	078-1018
083-1041/PCP/S	RG6 STANDARD F CONNECTOR - COMPRESSION TYPE - FOR COAX PLENUM CABLE	078-1018
083-1041/S	RG6 STANDARD F CONNECTOR - TWIST TYPE	NO TOOL REQUIRED
083-1042/CP/Q	RG6 QUAD F CONNECTOR - COMPRESSION TYPE	078-1018
083-1042/PCP/Q	RG6 QUAD F CONNECTOR - COMPRESSION TYPE - FOR COAX PLENUM CABLE	078-1018
083-1042/Q	RG6 QUAD F CONNECTOR - TWIST TYPE	NO TOOL REQUIRED
083-1043/CP/BNC	RG59 BNC CONNECTOR - COMPRESSION TYPE	078-1018
083-1044/CPRG11	RG11 STD/QUAD F CONNECTOR - COMPRESSION TYPE	078-1019
083-1045/PCPBNC	RG59 BNC CONNECTOR - FOR COAX PLENUM COAX CABLE	078-1018

**Vertical Cable is  
Your End-to-End  
Network Solution**

**LIMITED  
25 YEAR  
WARRANTY**

ADDITIONAL MATERIALS

# Periodic Table of VC FIBER Adapter Plates

264-MAP00-0000 BLANK	264-LAP01-1A06 KM 6P				
264-LAP01-1A06A FC 6P 6F	264-LAP01-2A08A FC 8P 8F	264-LAP01-2A12A FC 12P 12F			
UNV	UNV	UNV			
264-LAP02-1A06A ST 6P 6F	264-LAP02-2A08A ST 8P 8F	264-LAP02-2A12A ST 12P 12F			
UNV	UNV	UNV			
264-LAP03-1A4Z1 SC SX 4P 4F	264-LAP03-1A6Z1 SC SX 6P 6F	264-LAP03-1A8Z1 SC SX 8P 8F	264-LAP03-1B3Z1 SC DX 3P 6F	264-LAP03-2B4Z1 SC DX 4P 8F	264-LAP03-2B6Z1 SC DX 6P 12F
SM UPC	SM UPC	SM UPC	SM UPC	SM UPC	SM UPC
264-LAP03-1A4Y1 SC SX 4P 4F	264-LAP03-1A6Y1 SC SX 6P 6F	264-LAP03-1A8Y1 SC SX 8P 8F	264-LAP03-1B3Y1 SC DX 3P 6F	264-LAP03-2B4Y1 SC DX 4P 8F	264-LAP03-2B6Y1 SC DX 6P 12F
SM APC	SM APC	SM APC	SM APC	SM APC	SM APC
264-LAP03-1A4C1 SC SX 4P 4F	264-LAP03-1A6C1 SC SX 6P 6F	264-LAP03-1A8C1 SC SX 8P 8F	264-LAP03-1B3C1 SC DX 3P 6F	264-LAP03-2B4C1 SC DX 4P 8F	264-LAP03-2B6C1 SC DX 6P 12F
OM3	OM3	OM3	OM3	OM3	OM3
264-LAP04-1B4Z1 LC DX 4P 8F	264-LAP04-1B6Z1 LC DX 6P 12F	264-LAP04-1B8Z1 LC DX 8P 16F	264-LAP04-1C3Z1 LC QX 3P 12F	264-LAP04-2C4Z1 LC QX 4P 16F	264-LAP04-2C6Z1 LC QX 6P 24F
SM UPC	SM UPC	SM UPC	SM UPC	SM UPC	SM UPC
264-LAP04-1B4Y1 LC DX 4P 8F	264-LAP04-1B6Y1 LC DX 6P 12F	264-LAP04-1B8Y1 LC DX 8P 16F	264-LAP04-1C3Y1 LC QX 3P 12F	264-LAP04-2C4Y1 LC QX 4P 16F	264-LAP04-2C6Y1 LC QX 6P 24F
SM APC	SM APC	SM APC	SM APC	SM APC	SM APC
264-LAP04-1B4C1 LC DX 4P 8F	264-LAP04-1B6C1 LC DX 6P 12F	264-LAP04-1B8C1 LC DX 8P 16F	264-LAP04-1C3C1 LC QX 3P 12F	264-LAP04-2C4C1 LC QX 4P 16F	264-LAP04-2C6C1 LC QX 6P 24F
OM3	OM3	OM3	OM3	OM3	OM3
264-LAP04-1B4D1 LC DX 4P 8F	264-LAP04-1B6D1 LC DX 6P 12F	264-LAP04-1B8D1 LC DX 8P 16F	264-LAP04-1C3D1 LC QX 3P 12F	264-LAP04-2C4D1 LC QX 4P 16F	264-LAP04-2C6D1 LC QX 6P 24F
OM4	OM4	OM4	OM4	OM4	OM4
264-LAP05-1C4B1 MPO 4P	264-LAP05-1C6B1 MPO 6P	264-LAP05-1C8B1 MPO 8P			
UNV	UNV	UNV			
264-LAP05-1C4Z1 MPO 4P	264-LAP05-1C6Z1 MPO 6P	264-LAP05-1C8Z1 MPO 8P			
SM UPC	SM UPC	SM UPC			
264-LAP05-1C4Y1 MPO 4P	264-LAP05-1C6Y1 MPO 6P	264-LAP05-1C8Y1 MPO 8P			
SM APC	SM APC	SM APC			
264-LAP05-1C4C1 MPO 4P	264-LAP05-1C6C1 MPO 6P	264-LAP05-1C8C1 MPO 8P			
OM3	OM3	OM3			

Adapters of other colors are available as special orders, minimum order quantity – equivalent of 96 adapters of each color.



ADDITIONAL MATERIALS

# Periodic Table of VC FIBER Adapter Plates




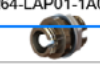





264-LAP03-1A4Z2 SC SX 4P 4F  SM UPC	264-LAP03-1A6Z2 SC SX 6P 6F  SM UPC	264-LAP03-1A8Z2 SC SX 8P 8F  SM UPC	264-LAP03-1B3Z2 SC DX 3P 6F  SM UPC	264-LAP03-2B4Z2 SC DX 4P 8F  SM UPC	264-LAP03-2B6Z2 SC DX 6P 12F  SM UPC
264-LAP03-1A4Y2 SC SX 4P 4F  SM APC	264-LAP03-1A6Y2 SC SX 6P 6F  SM APC	264-LAP03-1A8Y2 SC SX 8P 8F  SM APC	264-LAP03-1B3Y2 SC DX 3P 6F  SM APC	264-LAP03-2B4Y2 SC DX 4P 8F  SM APC	264-LAP03-2B6Y2 SC DX 6P 12F  SM APC
264-LAP03-1A4C2 SC SX 4P 4F  OM3	264-LAP03-1A6C2 SC SX 6P 6F  OM3	264-LAP03-1A8C2 SC SX 8P 8F  OM3	264-LAP03-1B3C2 SC DX 3P 6F  OM3	264-LAP03-2B4C2 SC DX 4P 8F  OM3	264-LAP03-2B6C2 SC DX 6P 12F  OM3
264-LAP04-1B4Z2 LC DX 4P 8F  SM UPC	264-LAP04-1B6Z2 LC DX 6P 12F  SM UPC	264-LAP04-1B8Z2 LC DX 8P 16F  SM UPC	264-LAP04-1C3Z2 LC QX 3P 12F  SM UPC	264-LAP04-2C4Z2 LC QX 4P 16F  SM UPC	264-LAP04-2C6Z2 LC QX 6P 24F  SM UPC
264-LAP04-1B4Y2 LC DX 4P 8F  SM APC	264-LAP04-1B6Y2 LC DX 6P 12F  SM APC	264-LAP04-1B8Y2 LC DX 8P 16F  SM APC	264-LAP04-1C3Y2 LC QX 3P 12F  SM APC	264-LAP04-2C4Y2 LC QX 4P 16F  SM APC	264-LAP04-2C6Y2 LC QX 6P 24F  SM APC
264-LAP04-1B4C2 LC DX 4P 8F  OM3	264-LAP04-1B6C2 LC DX 6P 12F  OM3	264-LAP04-1B8C2 LC DX 8P 16F  OM3	264-LAP04-1C3C2 LC QX 3P 12F  OM3	264-LAP04-2C4C2 LC QX 4P 16F  OM3	264-LAP04-2C6C2 LC QX 6P 24F  OM3
264-LAP04-1B4D2 LC DX 4P 8F  OM4	264-LAP04-1B6D2 LC DX 6P 12F  OM4	264-LAP04-1B8D1 LC DX 8P 16F  OM4	264-LAP04-1C3D2 LC QX 3P 12F  OM4	264-LAP04-2C4D2 LC QX 4P 16F  OM4	264-LAP04-2C6D2 LC QX 6P 24F  OM4
264-LAP05-1A4B2 MPO 4P  UNV	264-LAP05-1A6B2 MPO 6P  UNV	264-LAP05-1A8B2 MPO 8P  UNV			

LGX Adapter Plates P74

## HOW TO CHOOSE CORRECT PN

Tables below allow to choose the PN you need using a visual identification of adapter plates and adapters.

- STEP 1** Find the adapter type you need in one of the horizontal rows.
- STEP 2** Choose at the top of the table the column with the type of adapter plate you need.
- STEP 3** At the intersection of the row and column find the PN for the finished product.

			
Positions Fibers	6	8	12
FC	264-LAP01-1A06A 	264-LAP01-2A08A 	264-LAP01-2A12A 
ST	264-LAP02-1A06A 	264-LAP02-2A08A 	264-LAP02-2A12A 

(Optical Fiber Adapter Plate, FC, 8-position/8-fiber)

# ABBREVIATIONS AND ACRONYMS

## ADSS

All-Dielectric Self-Supporting (optical fiber cable).  
See also all-dielectric.

## APC

Angled Physical Contact.  
See angled physical contact.

## CM

Cable Management.  
See cable management.

## CMB

Cable Management Bar.  
See cable management bar.

## CRS

Cold-Rolled Steel.  
See cold-rolled steel.

## DU

DIN-rail Unit.  
See DIN-rail unit

## DX

Duplex.  
See duplex.

## FC

“Field-Assembly Connector”, “Ferrule Connector”, or “Fiber Channel”.  
A type of optical fiber connector (plug and adapter) defined by IEC 61754-13 (type FC-PC connector family) standard. FC plugs and adapters are based on a bulkhead construction with a threaded joint design and a 2.5-mm ferrule. FC plugs and adaptors mainly exist in a simplex variant.

## FM

Fiber management.  
See fiber management.

## IL

Insertion Loss.  
See insertion loss.

## IP

Ingress Protection.  
See Ingress Protection.

## ISP

Inside Plant.  
See inside plant.

## LC

“Lucent Connector”, “Little Connector”, or “Local Connector”.  
A type of optical fiber connector (plug and adapter) defined by IEC 61754-20 (type LC connector family) standard. LC plugs and adapters are based on a snap-in construction with a latch and a 1.25-mm ferrule. LC plugs exist in simplex and duplex variants, adapters – in simplex, duplex, and quadruplex variants.

## LGX

Light-Guide Cross-Connect.  
A popular mounting format of optical fiber adapter plates. The base of an LGX adapter plate consists of a rectangular metal plate (approximately 130 mm×30 mm [5.12 in×1.18 in]) and two panel fasteners (also known as “plunger locks” or “push pins”) located centrosymmetrically at approximately 118-mm (4.65-in) ctc distance from each other. Depending on the shape and number of openings in the LGX adapter plate that match various types of optical fiber adapters, LGX adapter plates may offer hundreds of different configurations.

## MM

Multimode.  
See multimode.

## MPO

“Multi-Fiber Push-On/Pull-Off”.  
A type of optical fiber array connector (plug and adapter) defined by IEC 61754-7 (type MPO connector family) standard. MPO plugs and adapters are based on a snap-in construction with a push-pull locking mechanism. MPO plugs in order to connect properly have two designs – one with pins and another with matching holes. For fiber arrangement MPO plugs use a matrix of channels with up to two rows and up to sixteen fibers in each row. MPO plugs exist in simplex variant, adapters can be joined in blocks consisting of more than one adapter.

## OM1

Optical Multimode Class 1. Type of multimode graded-index optical fiber with core diameter of 50 or 62.5 micrometers and cladding diameter of 125 micrometers. OM1 minimal modal bandwidth is 200 MHz-km at 850 nm and 500 MHz-km at 1300 nm. Currently, OM1 is not recommended by ANSI/TIA-568-3 standard as a transmission medium.

## OM2

Optical Multimode Class 2. Type of multimode graded-index optical fiber with core diameter of 50 or 62.5 micrometers and cladding diameter of 125 micrometers. OM2 minimal modal bandwidth is 500 MHz-km at both 850 nm and 1300 nm. Currently, OM2 is not recommended by the ANSI/TIA-568-3 standard as a transmission medium.

## OM3

Optical Multimode Class 3. Type of multimode graded-index optical fiber with core diameter of 50 micrometers and cladding diameter of 125 micrometers. OM3 minimal modal bandwidth is 1500 MHz-km at 850 nm and 500 MHz-km at 1300 nm.

## OM4

Optical Multimode Class 4. Type of multimode graded-index optical fiber with core diameter of 50 micrometers and cladding diameter of 125 micrometers. OM4 minimal modal bandwidth is 3500 MHz-km at 850 nm and 500 MHz-km at 1300 nm.

## OM5

Optical Multimode Class 5. Type of bend-insensitive multimode graded-index optical fiber with core diameter of 50 micrometers and cladding diameter of 125 micrometers. OM5 minimal modal bandwidth is 3500 MHz-km at 850 nm and 500 MHz-km at 1300 nm.

**OS1**

Optical Singlemode Class 1. Type of single-mode optical fiber with core diameter of 8–10 micrometers and cladding diameter of 125 micrometers. OS1 maximum attenuation is 0.5 dB/km for OSP (loose-tube) cables and 1.0 dB/km for ISP (tight-buffer) cables. Currently, OS1 is not recommended by the ANSI/TIA-568-3 standard as a transmission medium.

**OS2**

Optical Singlemode Class 2. Type of single-mode optical fiber with core diameter of 8–10 micrometers and cladding diameter of 125 micrometers. OS2 maximum attenuation is 0.4 dB/km for both OSP (loose-tube) and ISP (tight-buffer) cables.

**OSP**

Outside Plant.  
See outside plant.  
simplex variant.

**QX**

Quadruplex or quad.  
See quadruplex.

**RH**

Relative humidity.

**RL**

Return Loss.  
See return loss.

**RMU**

Rack-mount unit.  
See rack-mount unit.

**SC**

“Subscriber Connector”, “Square Connector”, or “Standard Connector”.

A type of optical fiber connector (plugs and adapters) defined by IEC 61754-4 (type SC connector family) standard. SC plugs and adapters are based on a snap-in construction with a push-pull lock mechanism and a 2.5-mm ferrule. SC plugs and adapters exist in simplex and duplex (also known as 568SC) variants.

**SM**

Singlemode.  
See singlemode.

**ST**

“Straight Tip” or “Bayonet Fiber Optic Connector (BFOC)”.

A type of optical fiber connector (plugs and adapters) defined by IEC 61754-2 (type BFOC/2.5 connector family (ST) standard. ST plugs and adapters are based on a bulkhead construction with a bayonet joint design and a 2.5-mm ferrule. ST plugs and adapters mainly exist in a simplex variant.

**SX**

Simplex.  
See simplex.

**TPE**

Thermoplastic Elastomer. Cable jacket material

belonging to the class of copolymers exhibiting properties typical of both rubbery and plastic materials. TPEs exhibit perfect thermal properties and material integrity when exposed to a wide range of temperatures and non-polar materials such as, for example, benzene, carbon tetrachloride, methane, ethylene, gasoline, toluene.

**UPC**

Ultra Physical Contact.  
See ultra physical contact.

**VFL**

Visual Fault Locator.  
See visual fault locator.

## TERMS

**“8”-shaped cable**

A self-supporting optical fiber cable consisting of two round cable units bonded together. One of the units contains optical fibers, the other one is used for housing the strength (load-bearing) element, commonly known as “messenger”, made of conductive (stranded steel wire) or non-conductive (aramid yarn, fiberglass epoxy, etc.) materials and used for fixing a length of cable to mounting hardware at both ends. Also known as “figure-8 cable”, “infinity cable”, “shotgun cable”.

**adapter**

A device designed to mate otherwise incompatible or impossible to connect directly connectors, usually, plugs. Examples: optical fiber adapter, feed-through adapter, hybrid adapter.

**adapter plate**

A modular unit of connecting hardware consisting of a metal plate with openings for mounting a certain connector type (e.g., optical fiber adapter, coaxial adapter, keystone module, etc.) and mechanical means allowing to fix it within a larger unit (panel, enclosure, box, etc.).

**adapter sleeve**

A mechanical element in a form of a split hollow shaft made of metal or ceramic, part of an optical fiber adapter, designed to align two optical fiber plugs for the purpose of light transmission between them.

**adhesive mounting**

A method of affixing one element to another based on adhesive properties of a film, tape, or pad attached to one of the elements. Usually, adhesive mounting is used when there is no other available mechanical means exists.

**adhesive pad**

An element in a form of a rectangular or round piece of double-sided adhesive tape.  
See also adhesive mounting.

**administration**

The concept describing the requirements toward cabling system documentation, the identification and labeling of its functional elements, and the record-keeping; defined in ISO/IEC 14763-1 and ANSI/TIA-606 standards.

**all-dielectric**

A construction of an optical fiber cable having no conductive elements among its components.

**anchor clamp**

A mounting hardware unit (a fitting) designed for fixing ends of optical fiber cables to the elements of support infrastructure (e.g., walls, poles, etc.) by gripping cable jacket in a wedge-like mechanism.

See also suspension clamp, tension clamp.

**angled physical contact**

A type of an optical fiber plug with the ferrule's end face polished at an angle of 8–10 degrees to the normal plane in order to minimize the back-reflection of the signal at the interface between two plugs.

**aramid yarn**

A class of synthetic fibers with exceptional thermal and mechanical properties. Aramid yarn is used in tight-buffer optical fiber cables as a strength member.

See also Kevlar.

**armored**

A type of cable construction with a wrapping of metal in a form of tape, wire, or sleeve. Armored constructions are used for protecting cable from environmental stress such as pressure, bending, and rodents; mostly used in underground installations (direct-buried/trench, conduit, tunnel), because of their weight and presence of conducting elements, usually, are not suitable for aerial installation.

**attenuation**

The decrease of the signal energy (power). In cabling systems, the attenuation is proportional to the distance the signal travels in the medium and affected by discrete objects such as connectors.

See also insertion loss.

**banding**

Method of fixing elements of outside plant mounting hardware (brackets, hooks, rings, etc.) to the elements of support infrastructure such as poles by using steel tape.

bend radius

The curvature of a cable bend not causing deterioration of the cable's transmission performance and mechanical properties. The term is also used in the form of "minimum bend radius".

**bezel**

A mechanical device designed to serve as a mounting holder/adaptor for a connector type that cannot be otherwise mounted in a certain type of connecting hardware. Example: keystone bezel, a frame with a keystone-compatible mounting mechanism allowing to transform a non-keystone connector (e.g., optical fiber adapter) into a keystone module.

**blank**

Unpopulated, empty unit of connecting hardware designed to accommodate various connectors of the same mounting type. Examples: blank adapter plate, blank keystone-module panel.

**boot**

A mechanical element made of soft and flexible materials (thermoplastics and rubbers), used as part of an optical fiber plug and designed to provide strain relief for and maintain optimal bend radius of the optical fiber at the point of its entry into the plug.

**bore**

The central hollow cylindrical portion of the optical plug ferrule bored along the ferrule's axis and having the diameter slightly larger than the fiber cladding, is used to align and fix the fiber in the ferrule.

**break-out kit**

A kit consisting of a furcation module, which attaches to the optical fiber cable being terminated and serves as a separator for optical fibers, and a number of fiber protection sleeves corresponding to the number of fibers being terminated.

The break-out-kit allows to make a transition from 250- or 900-micron cable fibers to units that are more mechanically stable and convenient in termination.

**bridge lance**

A mechanical element of connecting hardware (e.g., enclosure, cabinet), usually, made of metal, in a form of a stamped out narrow "bridge" designed to serve as an anchor point for a cable tie.

**buffer**

The first layer of protective materials applied to an optical fiber over the cladding, typically, having outside diameter of either 250 or 900 micrometers. The buffer is completely removed when preparing fiber for termination.

**bulkhead adapter**

A type of an optical fiber adapter, usually, made of metal and having cylindrical (barrel) shape. Typical bulkhead adapters: FC, ST.

**cable anchor point**

A mechanical device, usually, integrated into a unit of connecting hardware (e.g., enclosure, cassette, box) that serves as a mechanism for attaching a means for cable fastening such as cable ties, cable tie warps, etc.

**cable entry adapter**

A mechanical device, usually, in a form of a plate or bracket designed to provide a cable entry opening in a unit of connecting hardware with a special means of cable protection or connectorization (e.g., bushing, grommet, cable gland, connector).

See also cable entry opening.

**cable entry opening**

An opening (port) in a unit of connecting hardware (e.g., enclosure, cabinet, box, cassette) serving as an entry point for cable(s) being serviced by or terminated in that unit, specifically designated for that purpose and provided by special means of cable protection (e.g., bushing, grommet) and connectorization. See also cable entry adapter.

**cable gland**

A compression fitting designed for fixing cable at the cable entry point and, additionally, providing a moisture ingress protection. Cable glands are ranged by the size of their mounting opening (metric, NPT, or PG) and the range of cable diameters they can accommodate.



**cable management**

A system of components and methods allowing organization of distribution cables and cable assemblies in an orderly manner with the goal of efficiently using installation space, facilitating maintenance, providing means of administration, and ensuring cabling transmission performance by complying with the requirements toward cable bend radii, cable tension, and EM separation.

**cable management bar**

A mechanical device designed for supporting, organizing, and maintaining the optimal bend radii of cables connected to or terminated at a connecting hardware unit (e.g., panel, enclosure, etc.). Cable management bar can be an integrated part of the connecting hardware unit, removable ("snap-in" types), or standalone (e.g., mounted to the same rack, which is used for mounting the associated connecting hardware unit).

**cable O.D.**

Cable outside diameter, measured using the surface of the cable sheath/jacket.

**cable tie wrap**

A type of cable-bundling component in a form of soft hook-and-loop straps. Cable tie wraps may have different widths and lengths, anchor slots for tightening, and various colors facilitating identification of cable bundles. Cable tie wraps are considered the most efficient means of cable bundling because of their ability to create compact cable bundles without damaging cable jackets and applying less pressure compared to, for example, plastic cable ties. One of additional advantages of cable tie wraps is their reusability.

**cable tie**

A type of a cable-bundling component in a form of plastic tie with a lock on one end. Cable ties are one of the least expensive and most durable means for cable bundling, however, their disadvantages include expendability and potential damage they may inflict on cables because of sharp edges and high pressure due to relatively small area.

**cassette**

A modular unit of connecting hardware consisting of an enclosed case, a number of connectors (e.g., modular twisted-pair jacks, optical fiber adapters, coaxial adapters, etc.), and a cable entry mechanism, and intended to be used as part of a larger unit of connecting hardware such as panel or enclosure. Cassettes provide a convenient method of installation saving time and often are manufactured as pre-terminated units with custom cable lengths.

**central strength member**

An element placed in the center of optical fiber cable construction, made of conductive (e.g., steel wire or rod) or non-conductive (e.g., fiberglass epoxy rod) materials, and intended to protect optical fibers from stress by providing thermal (cable elongation/contraction due to environmental temperature fluctuations) and mechanical (e.g., tension, bending) stability.

**cleaver**

An optical fiber tool designed to cleave optical fibers at

angles normal to the fiber axis. Fiber cleaving is used in fusion and mechanical splicing for preparing fiber end surfaces that match each other with the least possible deviations.

**concentricity**

A measure of linear misalignment of the optical plug ferrule bore axis with the axis of the ferrule body. Concentricity of the ferrule characterizes ferrule's ability to center optical fiber within the ferrule and create efficiently aligned interface with identical ferrules.

**connector**

A mechanical device designed to connect two ends of transmission media of identical types with the goal of efficient signal transmission through the formed interface. As a general term, connector represents a number of subcategories such as plugs, sockets (also known as jacks), and adapters.

**cold-rolled steel**

One of the most popular materials used in making such units of connecting hardware as panels, enclosures, cabinets, and also elements of cabling support infrastructure, such as cable organizers.

**D flange**

One of the two opening form factors used for mounting optical fiber bulkhead adapters and having the cutout shape in a form of a semicircle resembling the letter D. See also DD flange.

**dB**

decibel, a unit of relative measurement, one tenth of a bel, used to express the ratio of one value to another on a logarithmic scale. In fiber optics the decibel is used for signal energy (power) measurement and calculation. See also dBm.

**dBm**

decibel-milliwatt, a unit of relative energy (power) measurement, used to express the energy (power) level with reference to one milliwatt on a logarithmic scale. In fiber optics the dBm is used as an additional to dB unit for measurement of absolute energy (power) because of its capability to express both very large and very small values in a short form. See also dB.

**DD flange**

One of the two opening form factors used for mounting optical fiber bulkhead adapters and having the cutout shape in a form of two semicircles resembling two mirrored letters D. See also D flange.

**DIN-rail**

A type of equipment mounting element in a form of a surface-mount metal profile resembling a rail. DIN-rail specifications are set by EC/EN 60715 standard. DIN-rail is one of the most popular means for mounting electrical and industrial equipment.

**DIN-rail clip**

A mounting element designed to provide units of equipment with a DIN-rail mounting capability.

**DIN-rail unit**

DIN-rail unit, a unit of measurement of DIN-rail horizontal

mounting space equal to 17.5 mm (~0.7 in). Also known as “module” or “M”, and “standard unit” or “SU”.

#### **duplex**

In optical fiber cabling, where only simplex signal transmission is possible in a single fiber, DX is used to describe cables with two fibers and connectors allowing to connect two fibers in one unit. Examples: duplex cable, duplex patch cord, duplex plug, duplex adapter. See also SX, QX.

#### **durability**

The ability of an optical fiber component (e.g., plug, adapter, mechanical splice, etc.) to withstand a certain number of mating cycles without degradation of its characteristics below a required level.

#### **enclosure**

A unit of connecting hardware in a form of a case, box, or other type of enclosed construction designed to house and protect connectors and associated cables, and equipped with all necessary details for the intended purpose.

#### **epoxy plug**

A type of optical fiber plug that uses epoxy adhesives for fixing optical fiber in the ferrule for the purpose of termination.

#### **ferrule**

The core part in an optical fiber connector that is used for fixing and aligning optical fiber. See also plug and bore.

#### **fiber class**

The system of optical fiber transmission performance specifications defined by ISO/IEC 11801 and adopted by ANSI/TIA-568.3-D standard. The system establishes a range of transmission performance levels (classes) of optical fibers with the goal of providing the industry with a comprehensive standardized guidance in order to ensure compatibility between systems, components, and active equipment, and to provide end users with a guaranteed quality of service.

#### **fiber management**

A system of components and methods allowing organization of distribution cables and cable assemblies in an orderly manner with the goal to efficiently use installation space, facilitate maintenance, provide means of administration, and ensure cabling transmission performance by complying with the requirements toward cable bend radii, cable tension, and transmission media separation.

#### **filler**

An optical fiber cable construction element used to fill hollow spaces in the cable resulted from unoccupied positions otherwise filled with optical fibers or tubes with optical fibers.

#### **flanged adapter**

An optical fiber adapter construction implementing two side flanges with mounting openings for screws and used in connecting hardware with heightened requirements toward mechanical stability of its components

(e.g., in industrial environments). See also flangeless adapter.

#### **flangeless adapter**

An optical fiber adapter construction implementing a spring mechanism for fixing the adapter in the related unit of connecting hardware without involving threaded joints. See also flangeless adapter.

#### **form factor**

A standard (very often a de-facto standard) for mounting certain connectors and units of connecting hardware that sets some limits on their dimensions, shape, and other mechanical parameters with the goal of ensuring their interoperability. Examples: SC form factor, keystone form factor, LGX form factor.

#### **fusion splice**

A permanent joint (connection) of two optical fibers produced by fusion splicing. See also fusion splicing.

#### **fusion splicing**

A method of joining (connecting) two optical fibers by melting their ends in an electric arc with forming a solid path for light transmission from one fiber to the other. See also fusion splice.

#### **grommet**

A mechanical element in a form of a rubber or plastic plug or ring used to cover cable entry openings in units of connecting hardware (e.g., enclosures, boxes, cassettes, etc.) with the goal to protect cable jacket from potential damage by sharp edges of the opening and also to provide additional protection against dust ingress.

#### **insertion loss**

A measure of the ability of cabling components and systems to attenuate signals being transmitted through them. In contrast to attenuation, which is a characteristic of a system with active transmitter and receiver connected to it, insertion loss is used to characterize passive components (connectors and cables) and systems (cabling links and channels). See also attenuation.

#### **Ingress Protection**

Ingress Protection (Code), also known as International Protection (Code). A system of codes introduced in IEC 60529 standard and adopted by NEMA as an American National Standard (ANSI/IEC 60529) for classifying the degrees of protection provided by the equipment enclosures.

#### **inside plant**

Cabling all elements of which are located indoors.

#### **jumper**

A widely used informal term applied to optical fiber cable assemblies such as patch cords and equipment cables.

#### **Kevlar**

Kevlar is a trademark by DuPont of a material commonly known as para-aramid with exceptional thermal and mechanical properties. Kevlar is used in tight-buffer optical fiber cables as a strength member. See also aramid yarn.

### **plug polish type**

A geometrical profile (shape) of the end face (tip) of an optical fiber plug defining its interface physical properties in terms of light reflection. Back-reflected light is highly undesirable or even intolerable in a number of fiber optic technologies because of its ability to damage the light source it returns to and to interfere with the transmitted signal. The plug polish types are classified by their back-reflecting properties in the form of return loss (RL). There are four plug polish types used:

- FLAT or flat contact, RL<-30 dB);
- PC or Physical Contact, RL<-35 dB);
- UPC or Ultra Physical Contact, RL<-55 dB);
- APC or Angled Physical Contact, RL<-65 dB).

See also return loss, angled physical contact, APC, ultra

### **physical contact, UPC.**

plunger lock

See panel fastener.

### **powder coating**

A type of a coating (finish) that is applied by spraying thermoplastic or thermoset polymer compound in a form of dry powder. The powder is adhered to the surface of the part being coated electrostatically and then cured by heating or by ultraviolet light. Powder coating has better mechanical properties (toughness, corrosion resistance) compared to conventional paint. Because of the absence of a liquid component powder coating allows to form thicker layers and provides better and more uniform appearance.

### **power meter**

A device, part of an optical fiber test set, that detects light injected into the fiber under test by the light source connected to the fiber at the other end and measures the energy (power) of the received light. The value of the measured energy (power) is then used by the power meter for calculating and reporting the insertion loss of the fiber under test.

### **push-pin**

See panel fastener.

### **quadruplex**

In optical fiber cabling, where only simplex signal transmission is possible in a single fiber, quadruplex is used to describe connectors allowing to connect four fibers in one unit. Example: QX adapter.

See also SX, DX.

### **rack**

An equipment mounting hardware unit consisting in its basic form of two vertical metal profiles with flanges (usually, front and rear) that are used for equipment mounting. The flanges are provided with a sequence of mounting openings (either tapped holes, or square openings for cage nuts, also known as captive or clip nuts). The rack mounting dimensions and size and spacing of the mounting holes are governed by standard specifications. The most popular rack mounting standard is EIA/ECA-310-E defining specifications for so-called 19-in, 23-in, and 24-in equipment mounting hardware. Equipment units intended to be mounted in standard-compliant racks shall also comply with the same specifications. Other popular constructions based

on the rack design principles are floor-standing cabinets and frames, and wall-mounted brackets, frames, and cabinets.

rack-mount

Method of equipment mounting that uses racks and rack-based constructions.

See also rack.

### **rack-mount unit**

A unit of measurement of the vertical mounting space in racks designed per the EIA/ECA-310-E standard specifications. One rack-mount unit (RMU) is equal to 1.75 in (44.45 mm). Usually, rack-mount units start its count from the top of the rack (from the first mounting hole position). Height of equipment units designed for rack-mounting is also measured in RMU.

See also RMU.

### **return loss**

A measure of the light energy (power) amount reflected back by an optical fiber connector interface and expressed as the ratio between the energy (power) of the back-reflected light and the energy (power) of the emitted light at the interface in dB.

See also RL.

### **reusability**

The capability of a component to be used more than one time. The reusability is, usually, measured in times.

### **ring**

An optical fiber management element in a form of a split ring, usually, made of plastic, and affixed to a related unit of connecting hardware or cable management using adhesive mounting or mechanical anchor mechanism.

### **rip cord**

An element of an optical fiber cable construction in a form of a cord, yarn, or narrow ribbon made of high-tensile material and used for ripping the cable jacket longitudinally, thus eliminating the need in a special tool and reducing the installation time.

### **scriber**

See scribing tool.

### **scribing tool**

An optical fiber tool, usually, in a form of a pen, with the tip made of material with a high coefficient of hardness (e.g., metal carbide, ruby, sapphire, etc.) and used during the process of fiber termination in epoxy plugs for scoring fibers in order to obtain clean flat surface ready for further polishing.

See also cleaver.

### **simplex**

In optical fiber cabling, where only simplex signal transmission is possible in a single fiber, SX is used to describe cables with one fiber and connectors allowing to connect two fibers in one unit. Examples: simplex cable, simplex patch cord, simplex plug, simplex adapter.

See also DX, QX.

### **singlemode**

A type of optical fiber with the core size allowing to exist only one path for light propagation. Advantages of singlemode fibers include low levels of insertion loss, practically absent modal dispersion, and ability to use multiple wavelengths for simultaneous signal transmission (WDM technologies),

making singlemode fibers ultimate transmission medium for long-range communications and systems requiring high data transmission rates, disadvantages – more expensive electronics due to more sophisticated light sources and circuitry compared to multimode fibers.

**slack**

A spare length of cable or fibers created to fulfill installation requirements or for the purposes of future expansions, reconfigurations, and repairs.

**slack storage mechanism**

A mechanical device or part of a unit of connecting hardware designed for storing cable or fiber slack, providing protection for cables and fibers, and maintaining required cable/fiber bend radii.

**splice**

A type of optical fiber connection or connector that connects two fibers by means of fusion or mechanical joining. Fusion splicing does not use a connector, the two fibers are “fused” or “welded” together and the joint is placed in a protection sleeve; in mechanical splicing a special connector is required for aligning and fixing the two fibers.

See also fusion splice, fusion splicing, mechanical splice.

**splice cassette**

A mechanical device, usually, in a form of a flat shallow container made of plastic or metal, equipped with splice holders, cable/fiber entry openings, anchor points for cable/fiber fastening, fiber management mechanism, and a cover or lid. Splice cassettes are intended to be used as part of a larger unit of connecting hardware and, in case of big fiber counts, can be made stackable. See also splice tray.

**splice closure**

A unit of optical fiber connecting hardware in a form of a fully enclosed container or “closure”, primarily designed for outside plant installation, and equipped for housing splicing components such as splice trays/cassettes. The main purpose of splice closure is to provide a protected point for connection of two cable lengths and for cable splitting/branching and termination. Splice closures may have various shapes and sizes suitable for a wide range of applications (long-range communications, high-fiber-count systems, drop-cable transition, etc.), environments and installation techniques (e.g., aerial, underground).

**splice holder**

A mechanical device designed to house and secure splices (fusion splice sleeves or mechanical splice connectors), and made of different materials (mostly plastics and rubbers). Splice holders have different shapes, dimensions, and capacities, and, usually, are not used as standalone devices but rather become parts of larger units of connecting hardware.

splice protection sleeve

A mechanical device in a form of a heat-shrinkable plastic tubing with an imbedded steel strength member designed to house, secure, and protect a fusion splice joint.

**splice sleeve**

See splice protection sleeve

**splice tray**

Same as splice cassette. Currently, both terms are used equally and interchangeably and there is no way to specify the difference between the two.

**splice-on plug**

A type of optical fiber plug that has a factory pre-installed, pre-polished, and cleaved stub of optical fiber in its ferrule. Field termination procedure of a splice-on plug includes fiber preparation (removing certain length of the buffer and coating), cleaving, and insertion into the plug until the fiber touches the end of the stub in the plug. When the contact is reached, a special locking mechanism in the plug is activated and the fiber being terminated becomes locked in place.

**spool**

A fiber management element in a form of a cylinder or half-cylinder made of plastic, with “wings” preventing fibers from going off the spool. Spools are widely used in large units of connecting hardware (e.g., enclosures, containers) for fiber management and storing fiber slack.

**stage**

A mechanical part or device in a form of a tray designed for the purposes of cable/fiber management and mounting splicing components. Stage, typically, comprises a pre-installed part or an accessory of a larger unit of connecting hardware and can be either retractable in order to provide convenient access to its contents or fixed.

**strength member**

An element of an optical fiber cable construction designed to provide certain mechanical properties, such as thermal stability, crush resistance, tensile strength, etc. Strength elements have different forms (yarn, rods, wires, tapes) and use different materials (aramid, nylon, steel, fiberglass epoxy).

**surface-mount box**

A unit of connecting hardware, usually, small and intended for either work area applications or small building entrance termination/demarcation points (e.g., FTTH terminals), designed for housing one or several connectors, and equipped with cable entry ports, fiber slack mechanism, sometimes small splice holder, and means for mounting on surfaces (walls, backboards, etc.).

**suspension clamp**

A mounting hardware unit (a fitting) designed for mid-span fixing optical fiber cables to the elements of support infrastructure (e.g., walls, poles, etc.) by gripping cable jacket in a clamp mechanism.

See also anchor clamp, tension clamp.

**tensile strength**

The force required to pull optical fiber cable to the point where one of its transmission performance or mechanical characteristics degrades below a certain limit.

**tension clamp**

A mounting hardware unit (a fitting) designed for fixing ends of optical fiber cables to the elements of support infrastructure (e.g., walls, poles, etc.) by gripping cable jacket in a wedge-like mechanism. Tension clamps differ from anchor clamps by their

smaller size and lower retention force.  
See also anchor clamp, suspension clamp.

**termination**

A method, process, and procedure of physical termination of an optical fiber into a connector (connectorization) with the purpose of allowing it to be connected to either active equipment or to other portions of cabling system, thus forming a transmission path for a signal.

**termination yield**

A ratio, usually, expressed in percent, between successfully terminated components and those that failed.

**“terminator”**

A 1984 science fiction action film released by Orion Pictures, co-written and directed by James Cameron and starring Arnold Schwarzenegger.

**tight buffer**

Optical fiber cable construction whereby each glass fiber is tightly buffered by fiber cable a protective thermoplastic coating to a diameter of 900 microns. Increased buffering provides ease of handling and connectorization.

See also loose tube.

**tracer**

A color-coded identification stripes (continuous or intermittent) applied to optical fibers or fiber groups (tubed or bundled) within optical fiber cables and used for fiber group identification per ANSI/TIA-598 color-coding scheme.

**tube**

An optical fiber cable element in a form of a color-coded plastic tube, designed for grouping fibers in multifiber cables for enhanced mechanical protection of fibers, for facilitating installation and termination, and for identification purposes.

**unibody**

A type of construction of a duplex optical fiber plug, which cannot be split into simplex components (a one-piece construction).

**ultra physical contact**

A type of an optical fiber plug with the ferrule’s end face machine-polished maintaining a certain curvature, which ensures two plugs connect at the fiber core area.

**visual fault locator**

A visual light emitting device used in optical fiber cabling during certain types of termination for termination point illumination, for fiber tracing/identification, and for troubleshooting. Visual fault locator, usually, emits visible red light, which can be detected, depending on the output power, at a distance up to several kilometers/miles.

**water-blocking material**

Materials in different forms (gels, “dry” fillers) used to fill internal space of optical fiber cables (filled cables) to prevent moisture ingress.

# Conduit Fill Calculator



**Number of  
cables in  
enclosed  
pathways  
meeting  
maximum fill  
ratio criteria**

ADDITIONAL MATERIALS

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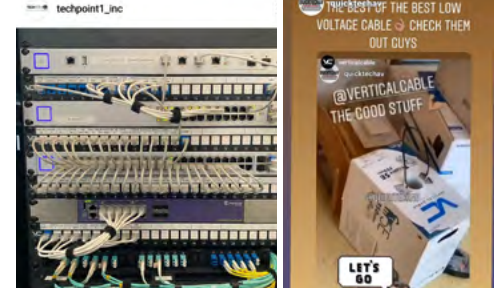


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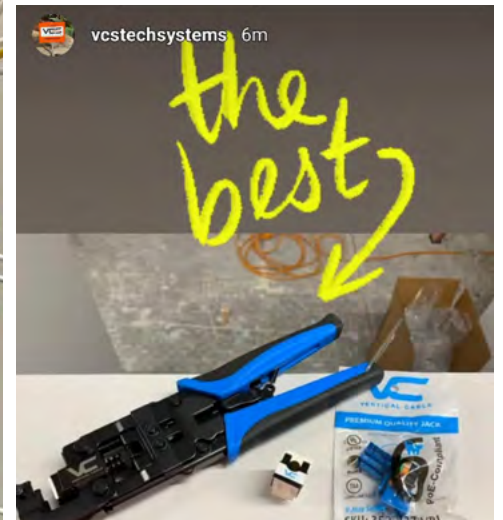


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**LET'S TALK TIME SAVING TOOLS! JUST GOT THE @VERTICALCABLE I-PUNCH KEYSTONE TOOL YESTERDAY - AND LET ME SAY, THIS THING IS 🔥🔥🔥!! SAVES OUR TECHS SO MUCH TIME! BEATS HAVING TO PUNCH EACH WIRE ONCE (OR TWICE!) - AND COMPLETES THE TASK IN ONE QUICK CRIMP. - @BLUERHYTHMAV**

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